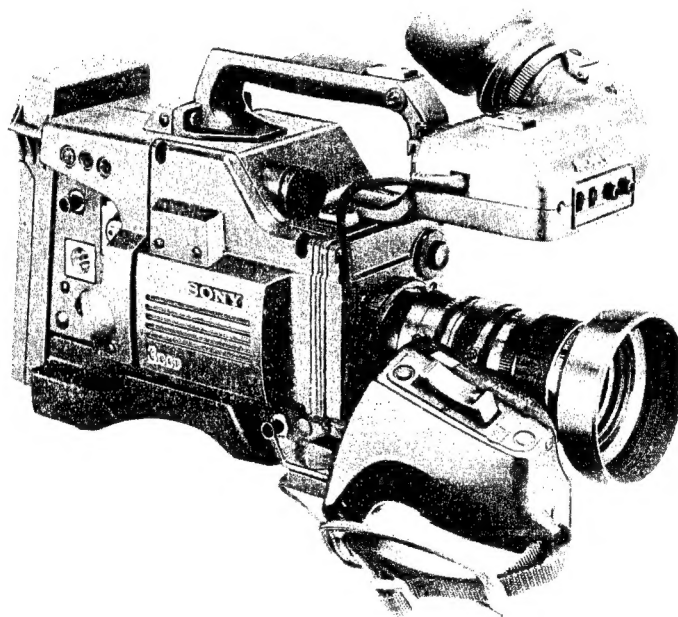


COLOR VIDEO CAMERA
CAMERA ADAPTOR
1.5INCH ELECTRONIC VIEWFINDER
ZOOM LENS

DXC-325P
CA-325P
DXF-325CE
VCL-810BX

VOL. 2 Revised-1
BLOCK DIAGRAMS
SEMICONDUCTORS
SCHEMATIC DIAGRAMS
BOARD ILLUSTRATIONS
SPARE PARTS

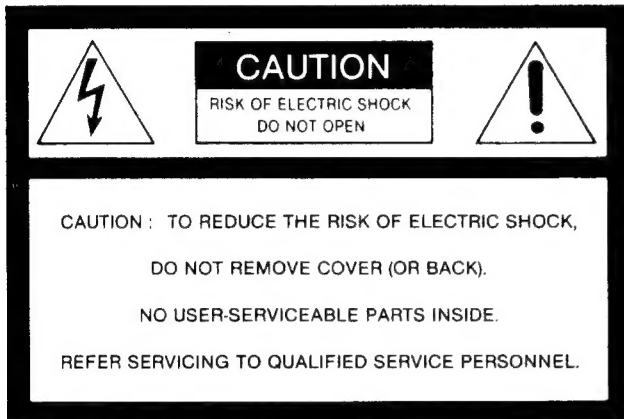


SONY
SERVICE MANUAL

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Warning—This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a computing device pursuant to Subpart J of Part 15 of FCC Rules.

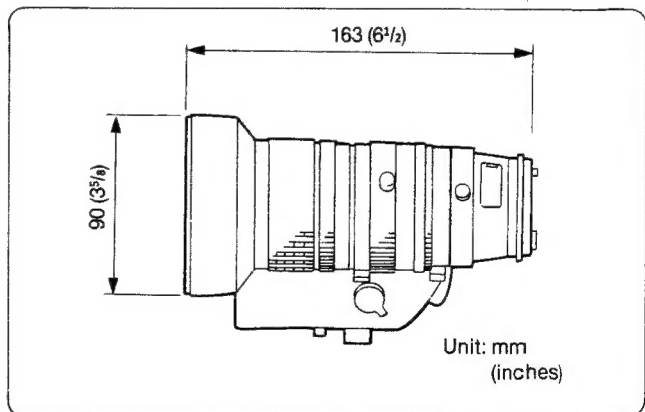
ZOOM LENS



SPECIFICATIONS

Focal length	8 to 80 mm
Zoom	Manual and motorized, selectable Zooming ratio: 10 ×
Maximum aperture ratio	1.4
Iris control	Manual and auto, selectable 1.4 to 16 and C (closed)
Range of object field (at the distance of 1.1 m)	W (wide angle): 622 × 829 (24½ × 32¾ inches) T (telephoto): 65 × 87 mm (2½ × 3½ inches)
Minimum object distance	1.1 m
Filter thread	62 mm dia., 0.75 pitch
Mount	Bayonet mount
Weight	Approx. 920g (2 lb) with lens hood
Supplied accessory	Operating instructions (1)

Dimensions

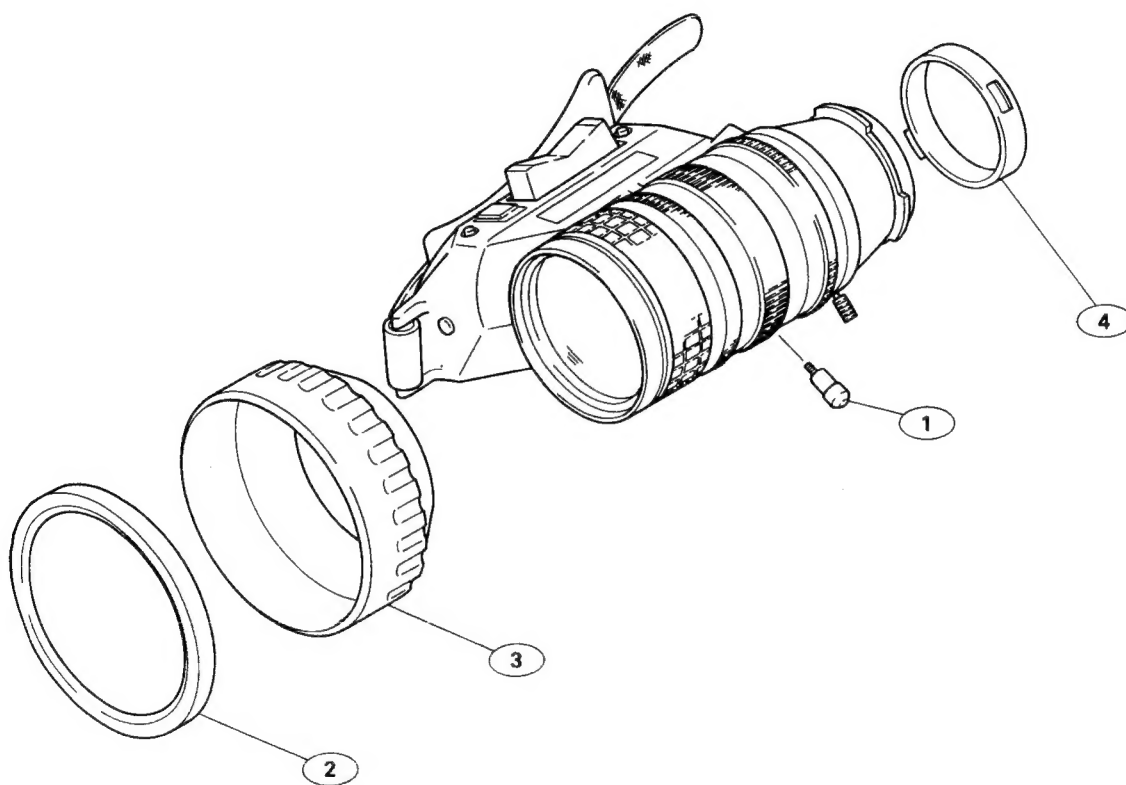


Design and specifications are subject to change without notice.

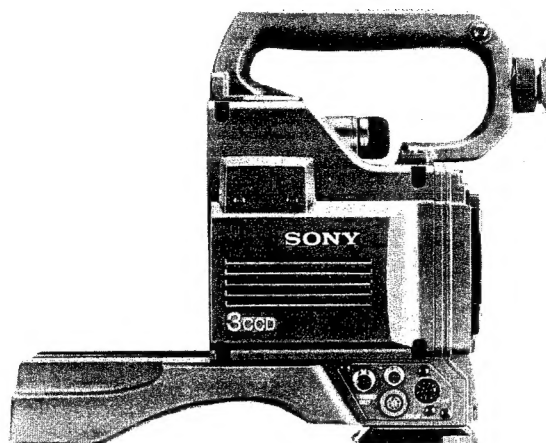
SONY®

SERVICE MANUAL

No.	Parts No.	SP Description
1	3-707-037-01	o LEVER, ZOOM
2	3-707-544-01	o CAP, FOOD
3	3-707-545-01	o FOOD
4	3-707-546-01	o CAP, DUST



COLOR VIDEO CAMERA



SPECIFICATIONS

Camera head (DXC-325/325P) and camera adaptor (CA-325/325P)
--

Image device	Interline-transfer CCD, 3-chip	Sync system	Internal External with the BS or VBS signal supplied to the GEN LOCK input connector or the reference signal input to the VTR/CCU/CMA connector from the GEN LOCK connector of the CCU-M3/M3P
Picture elements	510 × 492 (h/v) (NTSC) 500 × 582 (h/v) (PAL)	Horizontal resolution	530 lines (center)
Sensing area	6.4 mm × 4.8 mm (equivalent to a 1/2-inch pickup tube)	Minimum illumination	20 lux with F1.4, + 18 dB (NTSC) 20 lux with F1.4, + 18 dB (PAL)
Built-in filters	1: 3200 K 2: 5600 K + 1/8 ND 3: 5600 K	Sensitivity	2000 lux with F5.0, at 3200 K (NTSC) 2000 lux with F5.0, at 3200 K (PAL)
Lens mount	Bayonet mount	Gain selection	0 dB, 9 dB or 18 dB, selectable
Signal system	EIA standards, NTSC color system (for DXC 325) CCIR standards, PAL color system (for DXC 325P)	Video output	Composite signal: 1.0 V(p-p), sync negative, 75Ω unbalanced Y/C separate signal: Y: 1.0 V(p-p), sync negative, 75Ω unbalanced C: burst level 0.286 V (NTSC) 0.3 V (PAL) 75Ω without sync
Scanning system	525 lines, 2:1 interlace, 30 frames/sec. (NTSC) 625 lines, 2:1 interlace, 25 frames/sec. (PAL)	Signal to noise ratio	58 dB (NTSC) 56 dB (PAL)
Scanning frequency	Horizontal: 15.734 kHz (NTSC) 15.625 kHz (PAL) Vertical: 59.94 Hz (NTSC) 50.00 Hz (PAL)	Registration	0.05 % for Zone I 0.05 % for Zone II 0.05 % for Zone III

SONY®
SERVICE MANUAL

Inputs/Outputs VTR/CCU/CMA connector: Sony Q-type, 14-pin
 DC IN: XLR-type, 4-pin
 MIC IN: XLR-type, 3-pin
 GEN LOCK: BNC-type
 VIDEO OUT: BNC-type
 LENS: 1/2-inch lens connector (7-pin)
 2/3-inch lens connector (6-pin)
 VF: 8-pin
 EAR: mini jack
 INTERCOM: mini intercom
 TITLE: 8-pin

Power requirements
 12 V DC

Power consumption
 8 W (without viewfinder)

Operating temperature
 -5°C to +45°C (23°F to 113°F)

Storage temperature
 -20°C to +60°C (-4°F to 140°F)

Weight
 3 kg (4 lb 7 oz)

Dimensions
 See the illustrations below.
 Unit: mm (inches)

Carrying case (LC-325)

Weight Approx. 4.4 kg (9 lb 8 oz)
 Dimensions Approx. 608 × 260 × 386 mm (w/h/d)
 (24 × 10¹/₄ × 15¹/₄ inches)

Accessories supplied

CCQ-2BRS camera cable (with Q-type 14-pin connectors)
 (supplied with the DXC-325K/325PK/325L/325PL only) (1)
 CA-325/325P camera adaptor (supplied with the
 DXC-325K/325PK/325L/325PL only) (1)
 VCL-810BX zoom lens (supplied with the DXC-325K/325PK
 only) (1)
 DXF-325/325CE electronic viewfinder (supplied with the
 DXC-325K/325PK/325L/325PL only) (1)
 LC-325 carrying case (supplied with the DXC-325K/325PK/
 325L/325PL only) (1)
 Lens cap (1)
 Chart for flange focal length adjustment (1)

Design and specifications are subject to change without notice.

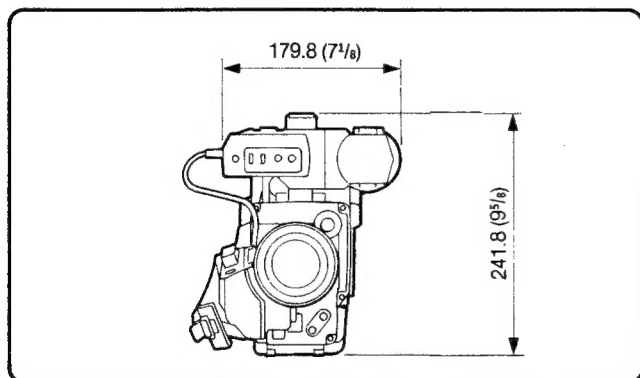
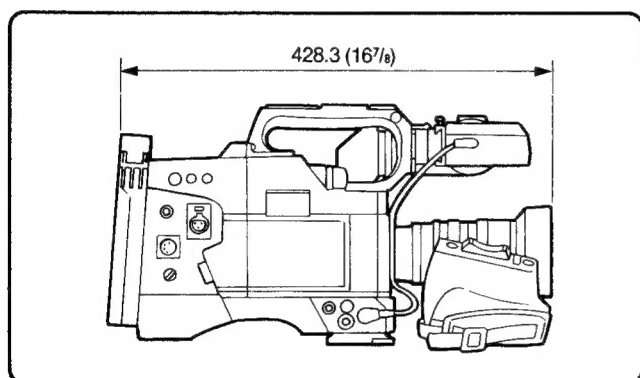


TABLE OF CONTENTS

A. BLOCK DIAGRAMS

Overall	A-1
CCD Block Diagram	A-5
IE-23 Block Diagram	A-9
PR-111 Block Diagram	A-11
ES-1 Block Diagram	A-13
AT-53 Block Diagram	A-15

B. SEMICONDUCTOR

Semiconductor	B-1
---------------------	-----

C. SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS

BC -15	}	C-3
DR -68			
TG -38			
CN -242	}	C-8
PA -73			
PA -74			
PA -75			
IE -23		C-15
PR -111	}	C-20
PR -109			
VA -70			
ES -1	}	C-28
CM -22			
MX -18			
AT -53	}	C-37
DUS -289			
Frame		C-42

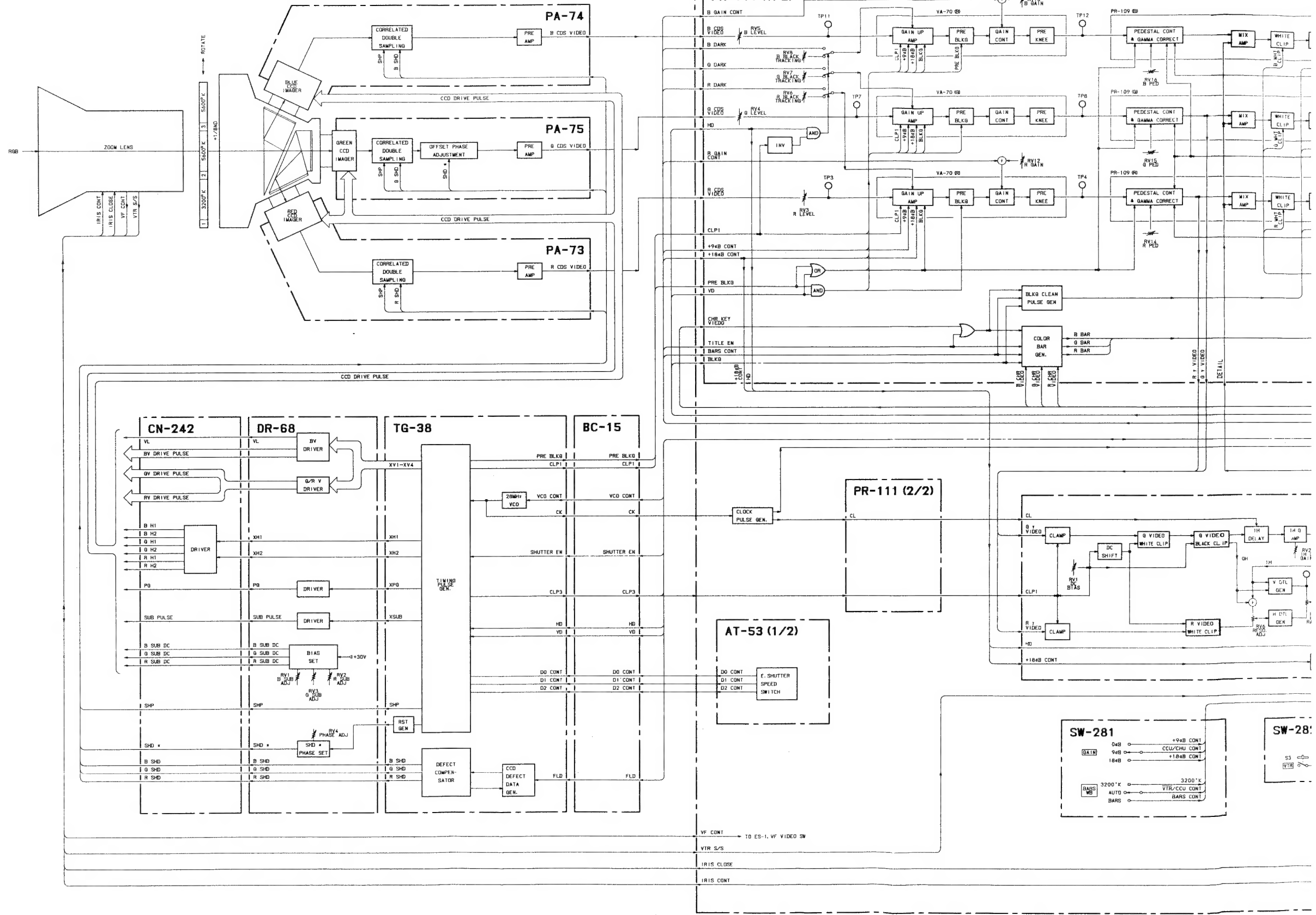
D. SPARE PARTS

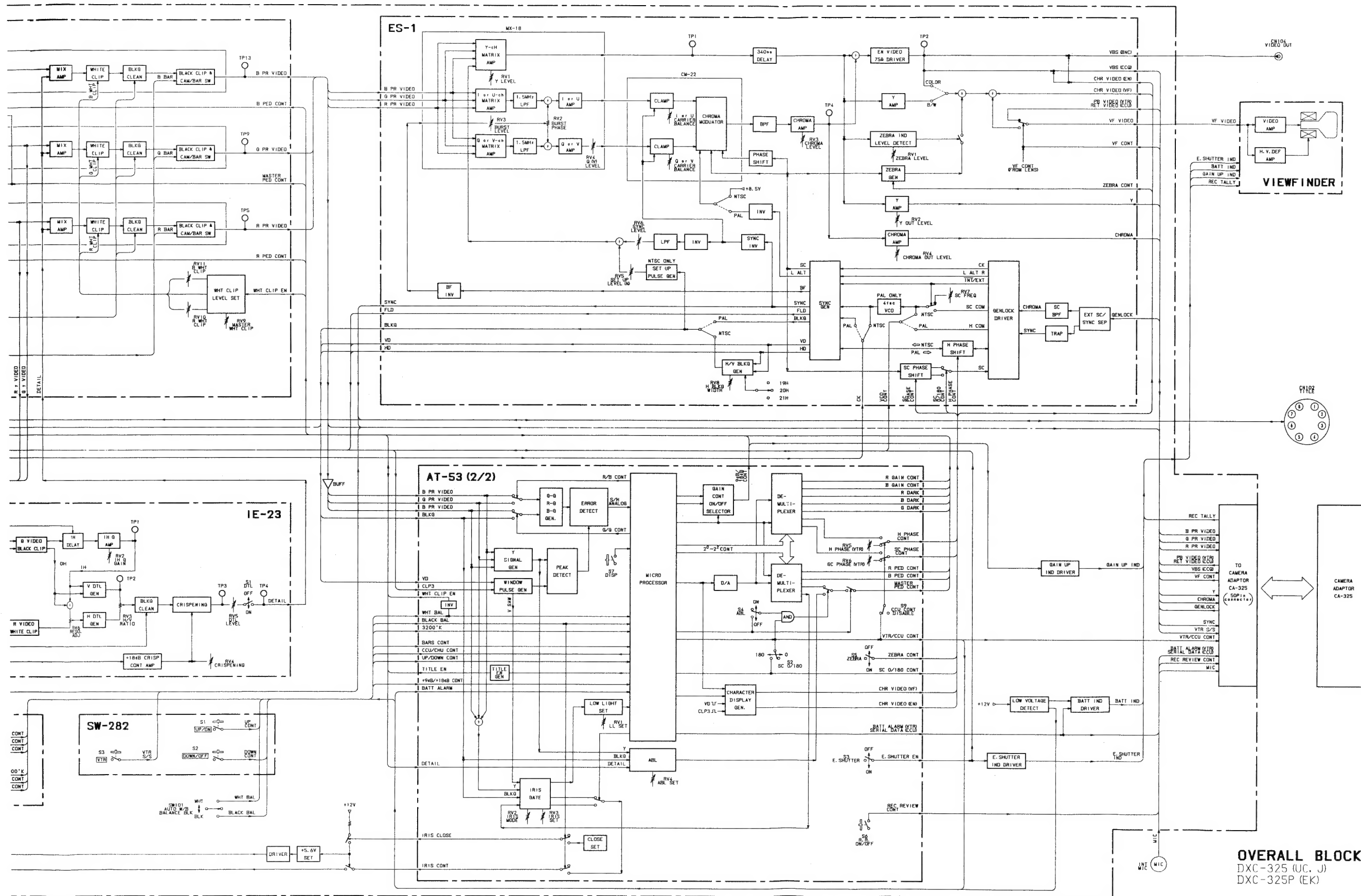
D-1. Parts Information	D-1
D-2. Screws	D-2
D-3. Exploded View	D-4
D-4. Packing Material and Accessories	D-13
D-5. Electrical Parts	D-15

SECTION A
BLOCK DIAGRAMS

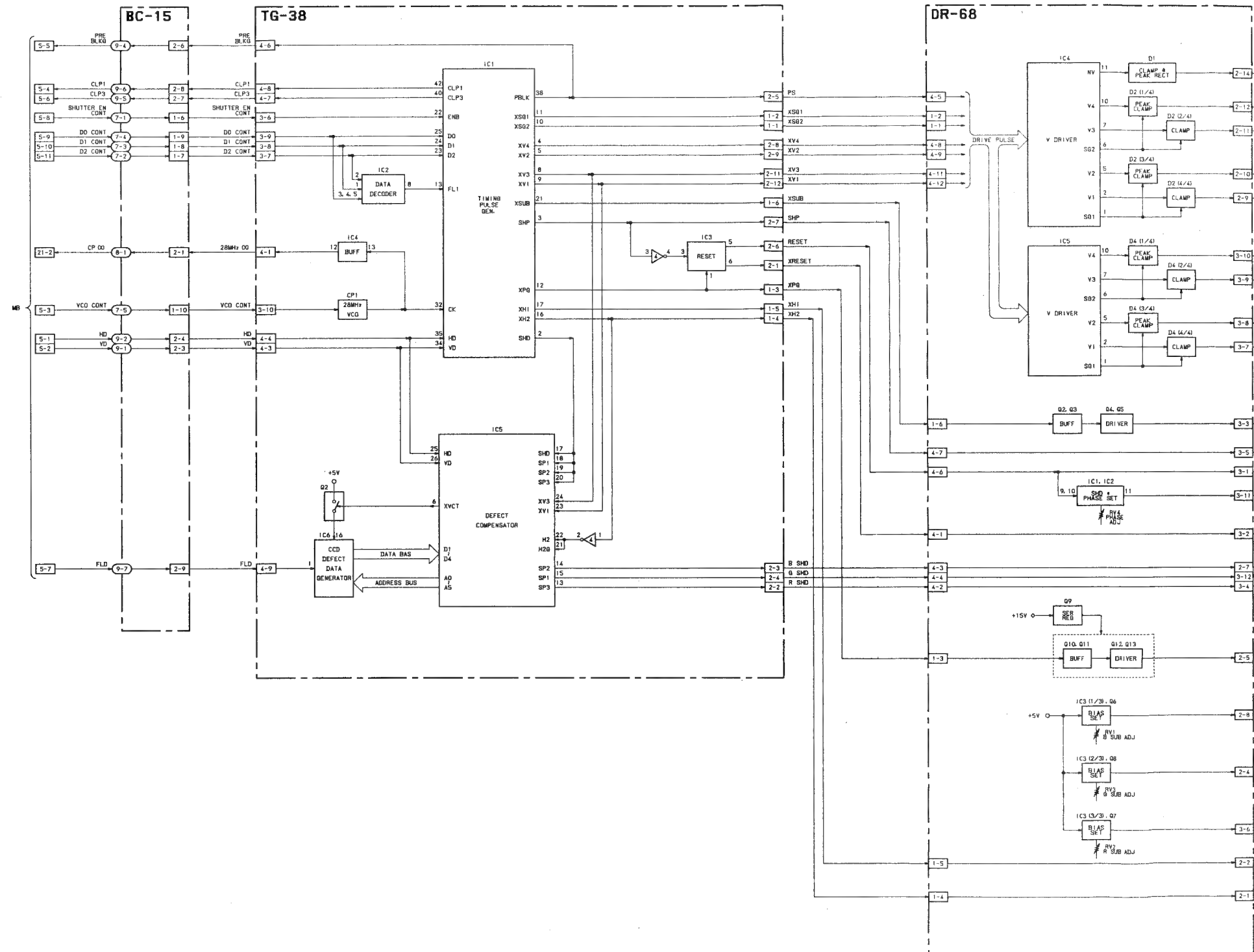
OVERALL BLOCK

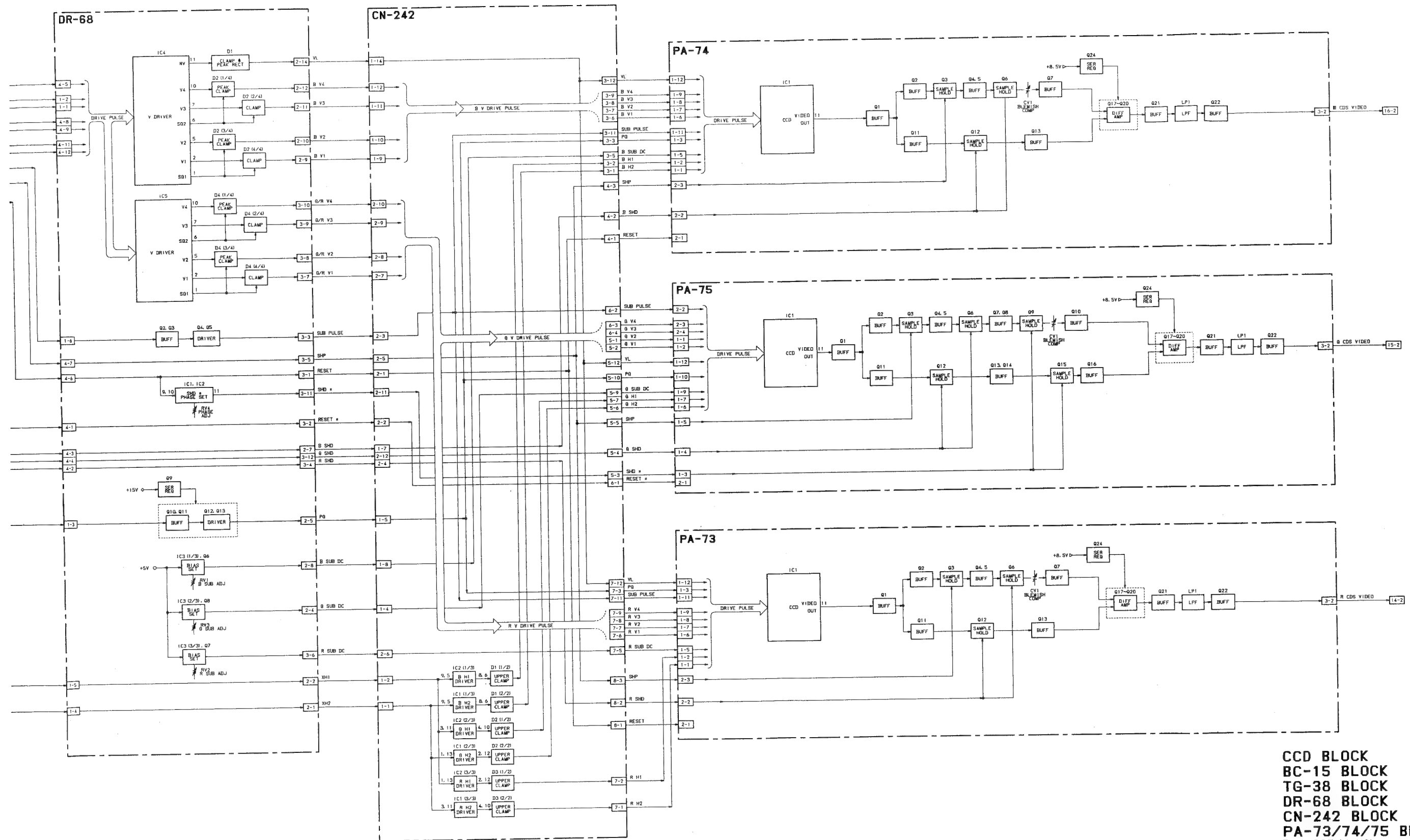
OVERALL BLOCK





CCD BLOCK

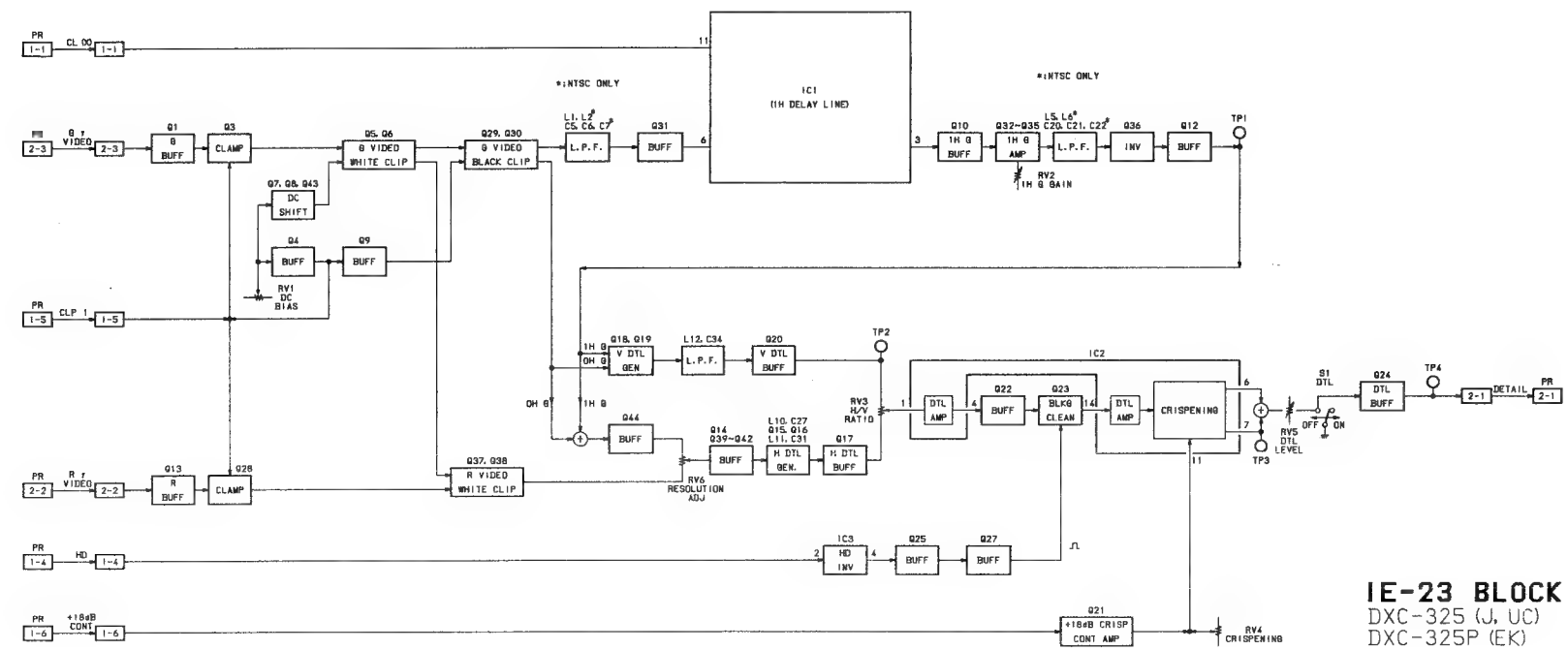


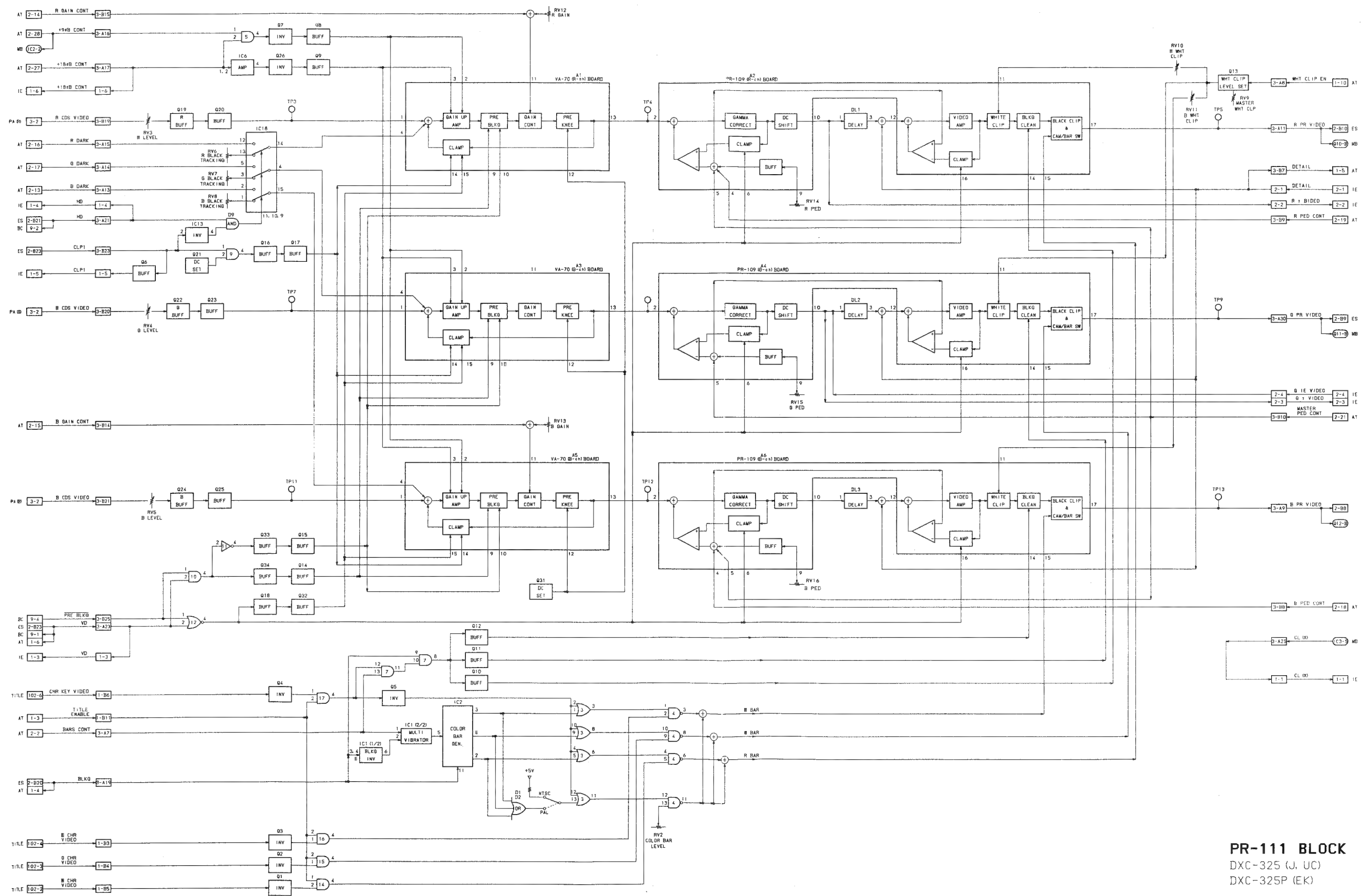


CCD BLOCK
BC-15 BLOCK
TG-38 BLOCK
DR-68 BLOCK
CN-242 BLOCK
PA-73/74/75 BLOCK
DXC-325 (J, UC)
DXC-325P (EK)

IE-23 BLOCK

IE-23 BLOCK



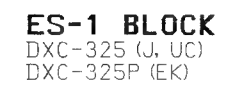


PR-111 BLOCK

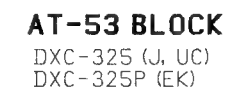
DXC-325 (J, UC)

DXC-325P (EK)

1



AT-53 BLOCK		AT-53 BLOCK
-------------	--	-------------



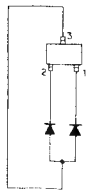
SECTION B

SEMICONDUCTOR

The circuit diagram of is obtained from the IC data book published by the manufacturer.

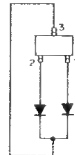
TYPE	PAGE	TYPE	PAGE
1S2835.....	B-2	NJM1496M.....	B-11
1S2837.....	B-2	NJM2903M.....	B-11
1S955.....	B-2		
1SS119.....	B-2	NTM2369.....	B-2
1SS123.....	B-2	RD??M-B?.....	B-2
2SA1226.....	B-2	SN74LS221NS..	B-11
2SA1462.....	B-2		
2SA812.....	B-2	TC4001BF.....	B-11
2SB798.....	B-2	TC4051BF.....	B-11
2SC1623.....	B-2	TC4053BF.....	B-11
2SC2757.....	B-2	TC4069UBF.....	B-11
2SD999.....	B-2		
2SK94.....	B-2	TC40H000F....	B-12
3SK163.....	B-2	TC40H008F....	B-12
BX1340.....	B-3	TC40H027F....	B-12
CX22017.....	B-3	TC40H032F....	B-12
CX7930A.....	B-3	TC40H076AF...B-12	
CX815.....	B-5	TC40H193F....	B-12
CXA1065M.....	B-5		
CXD1155Q.....	B-6	TC4S01F.....	B-12
CXD1251Q.....	B-9	TC4S11F.....	B-13
DTA114YK.....	B-2	TC4S71F.....	B-13
DTC114YK.....	B-2	TC4S81F.....	B-13
HD44860B42...B-9		TC4SU69F.....	B-13
HZ?ALL.....	B-2		
HZ?BLL.....	B-2	TC74HC04F....	B-13
MA122.....	B-2	TC74HC08F....	B-13
MA123.....	B-2	TC74HC14F....	B-13
MB7114LPF....B-10		TC74HC27F....	B-13
MC14557BF....B-10		TC74HC74F....	B-13
MN1237AD.....B-10			
MN3801.....B-11		TL062ACPS....B-14	
		TL064CNS....B-14	
		TL082CPS....B-14	
		μA711CNS....B-14	
		μPC311G2....B-14	
		μPC324G2....B-14	
		μPC358G2....B-14	
		μPD4053BG....B-11	
		XN4608.....B-2	
		XN6401.....B-2	
		XN6435.....B-2	
		XN6501.....B-2	

TOP VIEW (SCALE 4/1)

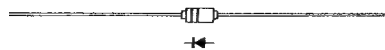


1S2835

TOP VIEW (SCALE 4/1)

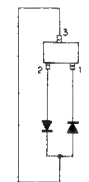


1S2837



1S955

TOP VIEW (SCALE 4/1)

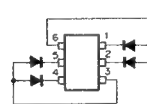


1SS123



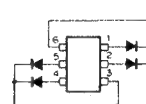
HZ ? ALL
HZ ? BLL

TOP VIEW



MA122

TOP VIEW



MA123

TOP VIEW (SCALE 4/1)

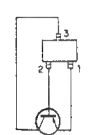


RD ? ? MB ?



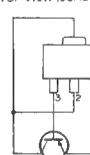
1SS119

TOP VIEW (SCALE 4/1)



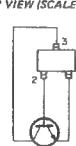
2SA1226
2SA1462
2SA812

TOP VIEW (SCALE 4/1)



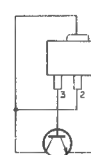
2SB798

TOP VIEW (SCALE 4/1)



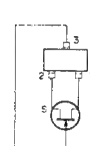
2SC1623
2SC2757
NTM2369

TOP VIEW (SCALE 4/1)

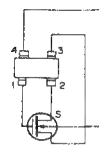


2SD999

TOP VIEW (SCALE 4/1)

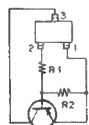


2SK94



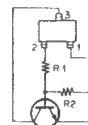
3SK163

TOP VIEW (SCALE 4/1)

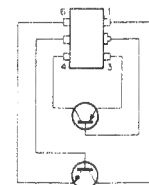


DTC114YK (R1 = 10K, R2 = 47K)

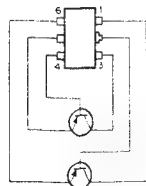
TOP VIEW (SCALE 4/1)



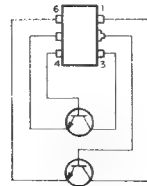
DTA114YK (R1 = 10K, R2 = 47K)



XN4608

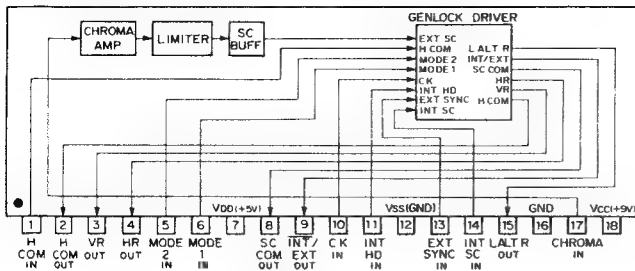


XN6401
XN6435



XN6501

BX1340 (SONY)

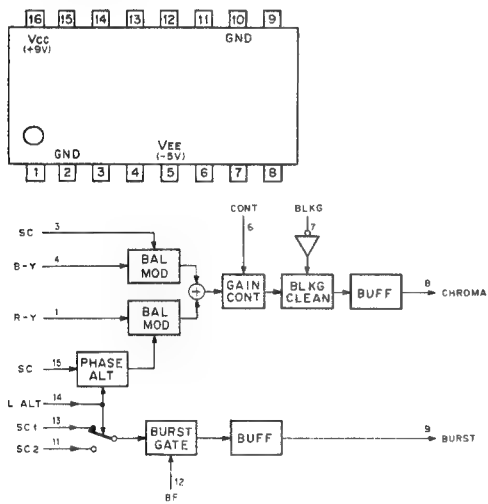
SC LIMITER AND GENLOCK DRIVER
- REAR VIEW -

MODE SELECTION

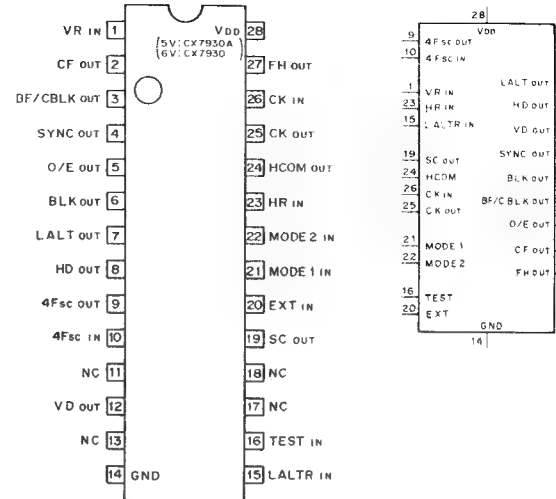
MODE 1	MODE 2	MODE
1	1	NTSC
0	0	PAL

0; LOW LEVEL
1; HIGH LEVEL

CX22017 (SONY)

VIDEO SIGNAL PROCESSOR
- TOP VIEW -

CX7930A (SONY) FLAT PACKAGE

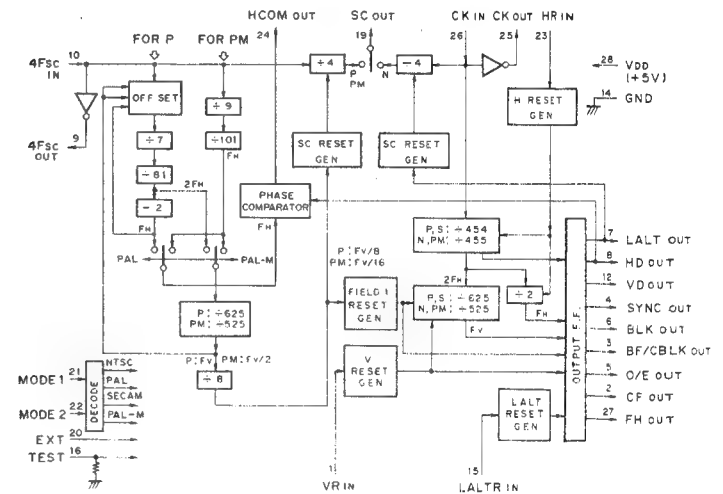
C-MOS SYNC GENERATOR (NTSC, PAL-M, PAL, SECAM)
- TOP VIEW -O/E : ODD/EVEN FIELD
CF : COLOR FRAME PULSE
HCOM : H COMPARATOR

SYSTEM	4Fsc	CLOCK
NTSC	910 FH	910 FH
PAL	1135 FH + 2Fv	908 FH
PALM	909 FH	910 FH
SECAM		908 FH

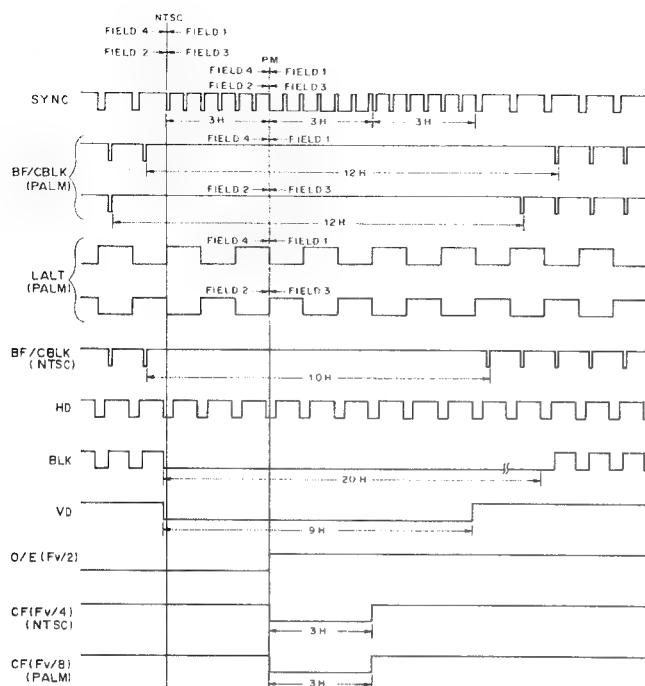
INPUTS		SYSTEM	INPUTS		FUNCTION
MODE 1	MODE 2		EXT	TEST	
0	0	NTSC	0	0	INTERNAL
0	1	SECAM	0	1	INVALID
1	0	PALM	1	0	EXT
1	1	PAL	1	1	TEST

0; LOW LEVEL (GND)

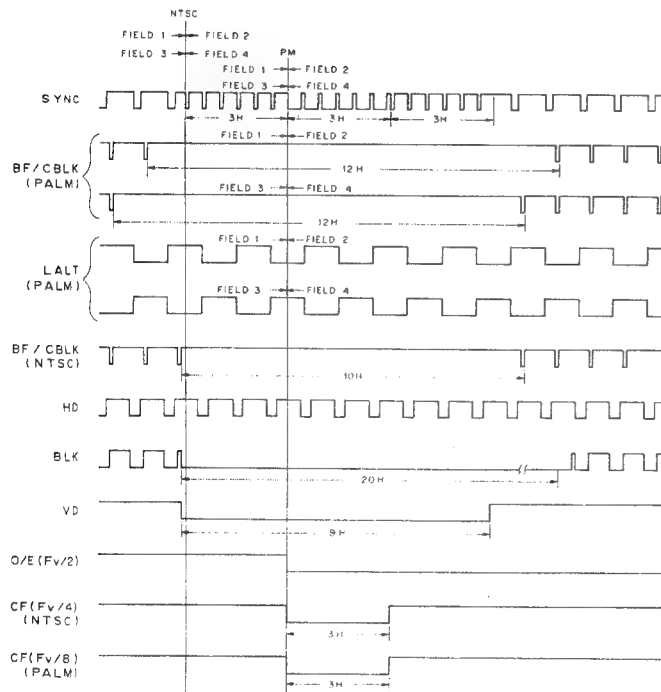
TEST '0': OPEN

DXC-325(J, UC)
DXC-325P(EK)

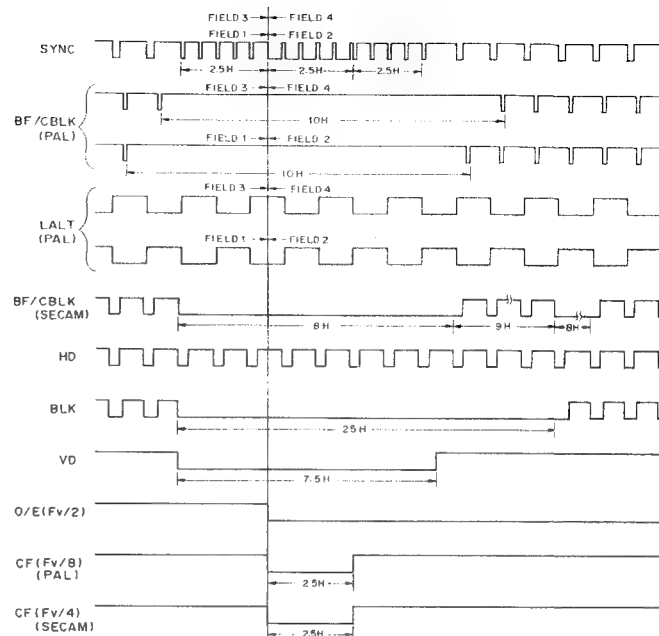
NTSC, PAL-M (FIELD 1,3)



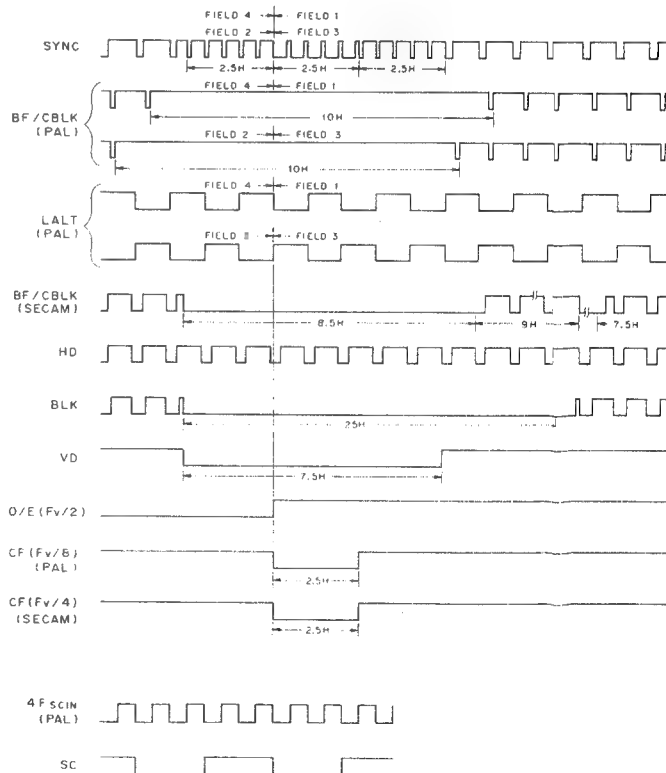
NTSC, PAL-M (FIELD 2,4)



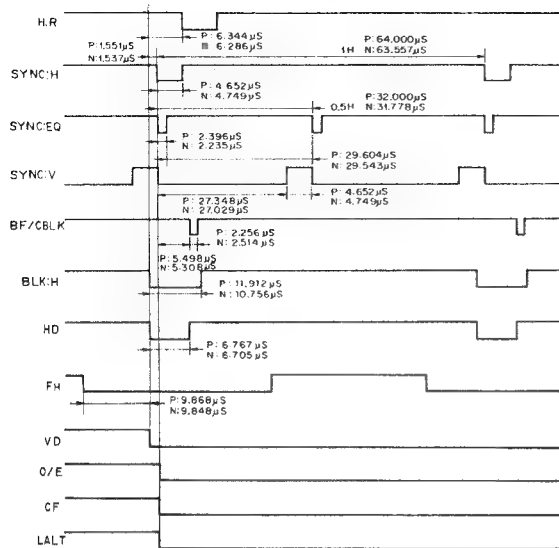
PAL, SECAM (FIELD 4,2)



PAL, SECAM (FIELD 1,3)

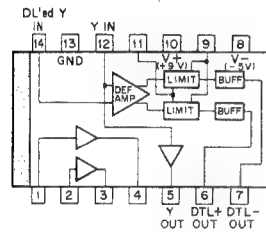


P: PAL, SECAM
N: NTSC, PALM



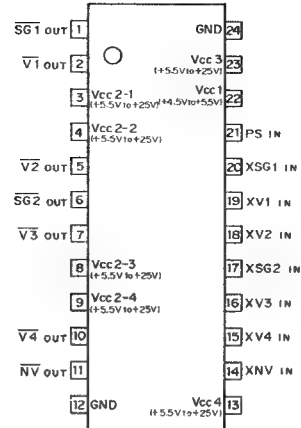
CX815 (SONY)

DTL AMPLIFIER
- TOP VIEW -

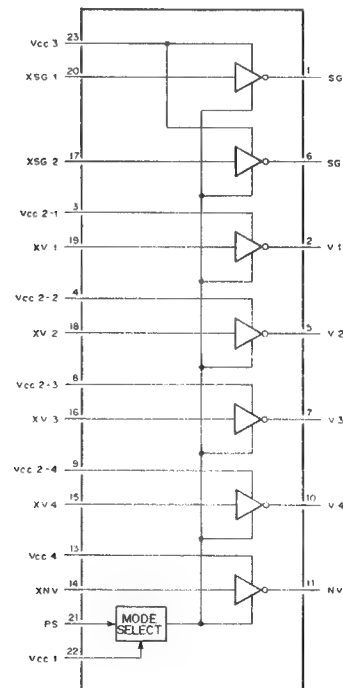


CXA1065M (SONY) FLAT PACKAGE

INVERTING DRIVER FOR CCD CLOCK WITH POWER SAVE
- TOP VIEW -



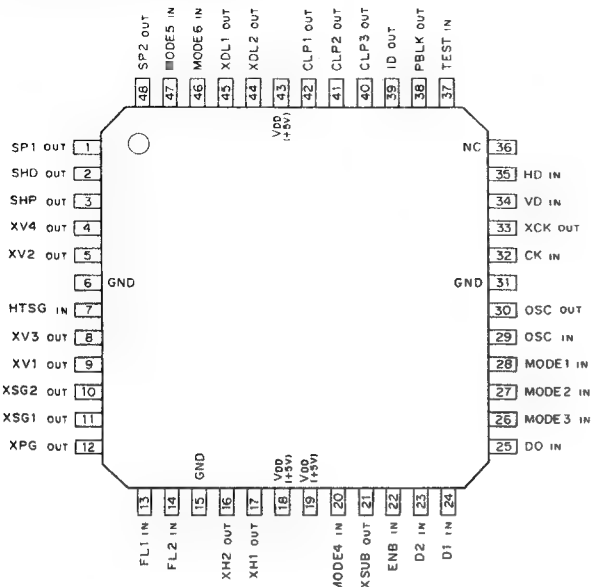
XV1-XV4; VERTICAL REGISTER TRANSMISSION CLOCK INPUT
V1-V4; VERTICAL REGISTER TRANSMISSION CLOCK OUTPUT
XSG1, XSG2; SENSER GATE PULSE INPUT
SG1, SG2; SENSER GATE PULSE OUTPUT
XNV; DRIVER INPUT
NV; DRIVER OUTPUT
PS; POWER SAVE INPUT
Vcc1; BIAS VOLTAGE
Vcc 2-1; V1 OUTPUT PULSE VOLTAGE
Vcc 2-2; V2 OUTPUT PULSE VOLTAGE
Vcc 2-3; V3 OUTPUT PULSE VOLTAGE
Vcc 2-4; V4 OUTPUT PULSE VOLTAGE
Vcc 3; SG1, SG2 OUTPUT PULSE VOLTAGE
Vcc 4; NV OUTPUT PULSE VOLTAGE



DXC-325(J, UC)
DXC-325P(EK)

CXD1155Q (SONY) FLAT PACKAGE

C-MOS TIMING PULSE GENERATOR FOR CCD CAMERA
- TOP VIEW -



MODE SELECTION

	H	L
FL1	NORMAL	FLICKERLESS
FL2	50Hz	60Hz
MODE1	B/W	COLOR
MODE2	FRAME	FIELD
MODE3	CCIR	NTSC
MODE4	PARALLEL INPUT	SERIAL INPUT

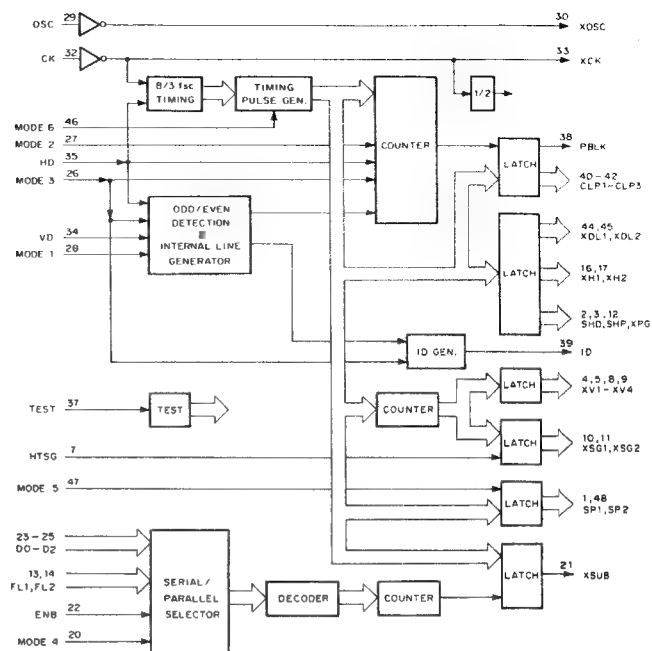
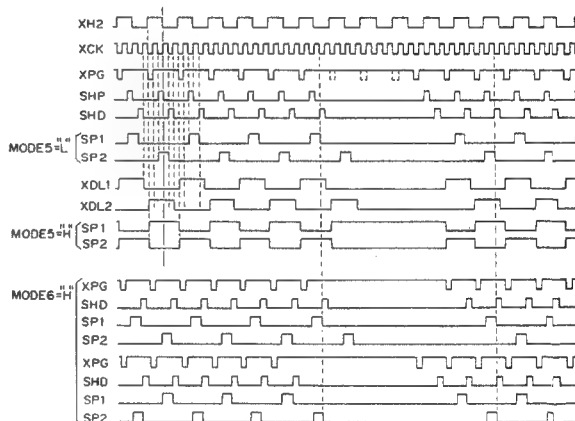
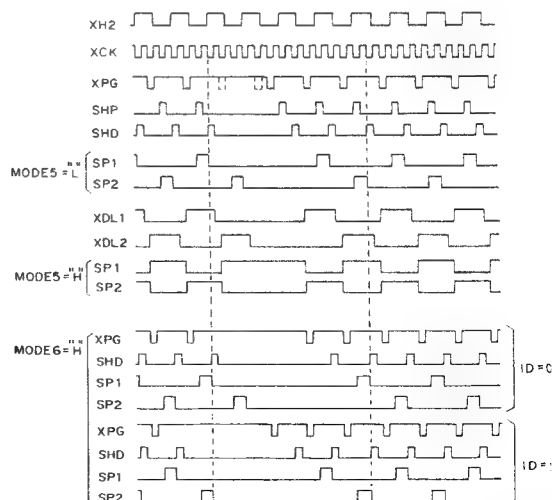
• MODE5, MODE6 ; SEE TIMING CHART

PARALLEL INPUT MODE (MODE4="H")

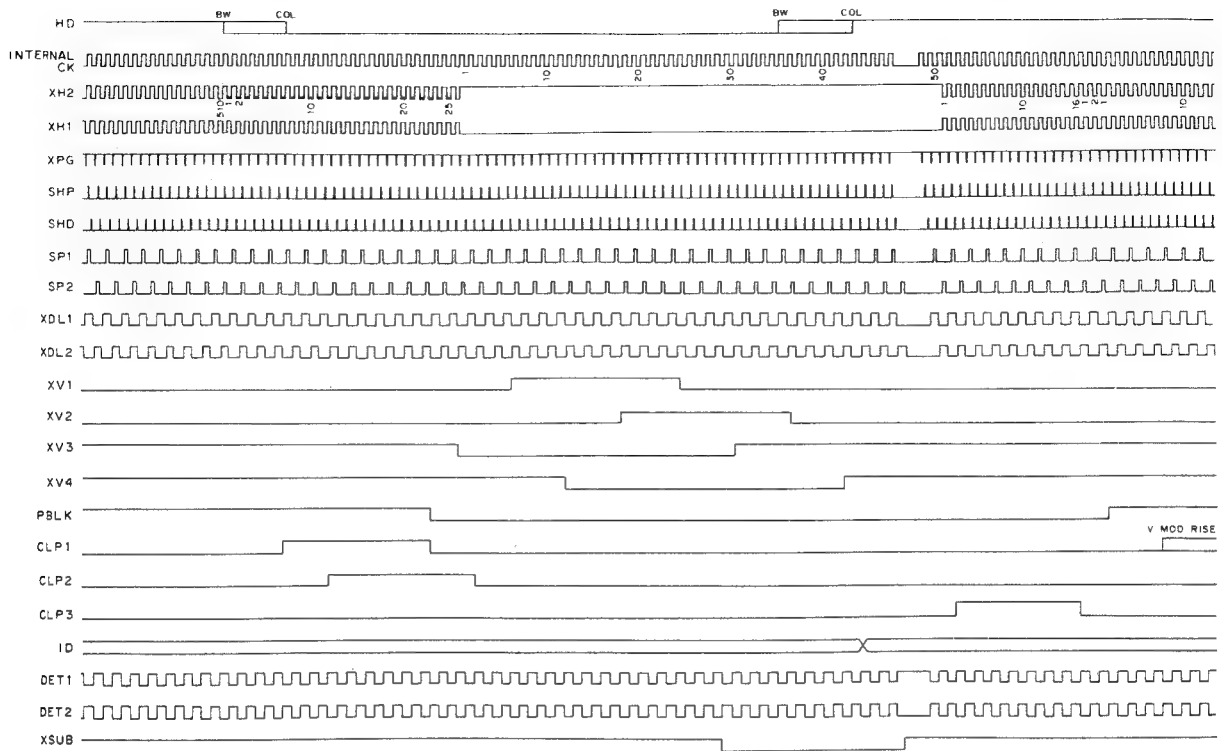
MODE4	ENB	FL1	FL2	D2	D1	D0	SPEED(S)
1	1	1	X	0	0	0	1/60
1	1	1	X	0	0	1	1/125
1	1	1	X	0	1	0	1/250
1	1	1	X	0	1	1	1/500
1	1	1	X	1	0	0	1/1000
1	1	1	X	1	0	1	1/2000
1	1	1	X	1	1	0	1/4000
1	1	1	X	1	1	1	1/10000
X	1	0	1	X	X	X	1/100
X	1	0	0	X	X	X	1/120
X	0	X	X	X	X	X	NORMAL

1 ; HIGH LEVEL
0 ; LOW LEVEL
X ; DON'T CARE

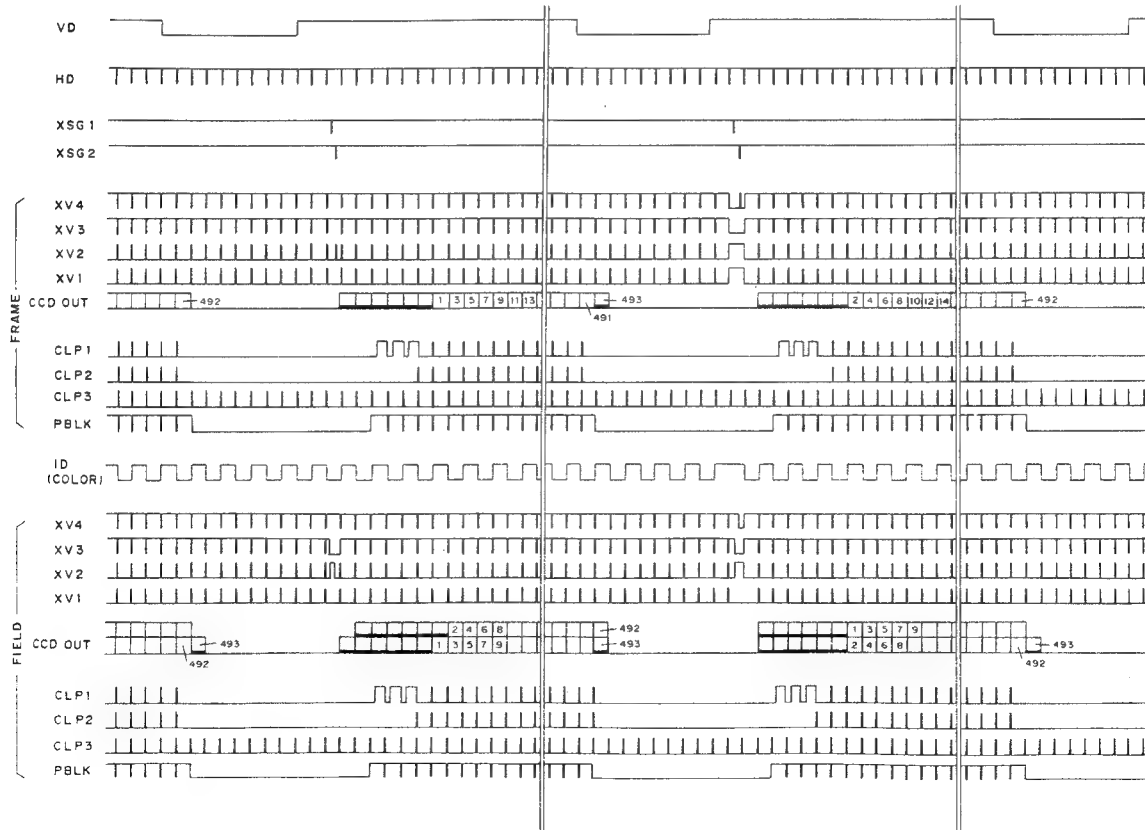
ENB ; ELECTRONIC SHUTTER ENABLE INPUT
D0-D2 ; SHUTTER SPEED MODE SIGNAL INPUT
SHD ; DATA SAMPLE HOLD PULSE
SHP ; PRE-CHARGE LEVEL SAMPLE HOLD PULSE
XV1-XV4 ; VERTICAL REGISTER TRANSMISSION CLOCK OUTPUT
XH1, XH2 ; HORIZONTAL REGISTER TRANSMISSION CLOCK OUTPUT
XSG1, XSG2 ; SENSOR GATE PULSE OUTPUT
XDL1, XDL2 ; DELAY LINE CONTROL PULSE OUTPUT
XPG ; PRE-CHARGE GATE PULSE OUTPUT
SP1, SP2 ; COLOR SEPARATION PULSE OUTPUT
CLP1-CLP3 ; CLAMP PULSE OUTPUT
10 ; LINE DISCRIMINATION PULSE OUTPUT
HTSG ; READ OUT STOP SIGNAL INPUT
TEST ; TEST MODE SIGNAL INPUT
OSC ; OSCILLATING SIGNAL INPUT
XOSC ; INVERTED OSCILLATING SIGNAL OUTPUT
CK ; CLOCK INPUT
XCK ; INVERTED CLOCK OUTPUT
PBLK ; BLANKING CLEANING PULSE
XSUB ; ELECTRIC CHARGE DISCHARGING PULSE OUTPUT
HD ; HORIZONTAL DRIVE INPUT
VD ; VERTICAL DRIVE INPUT

HIGH SPEED SYSTEM TIMING
NTSCHIGH SPEED SYSTEM TIMING
CCIR

NTSC



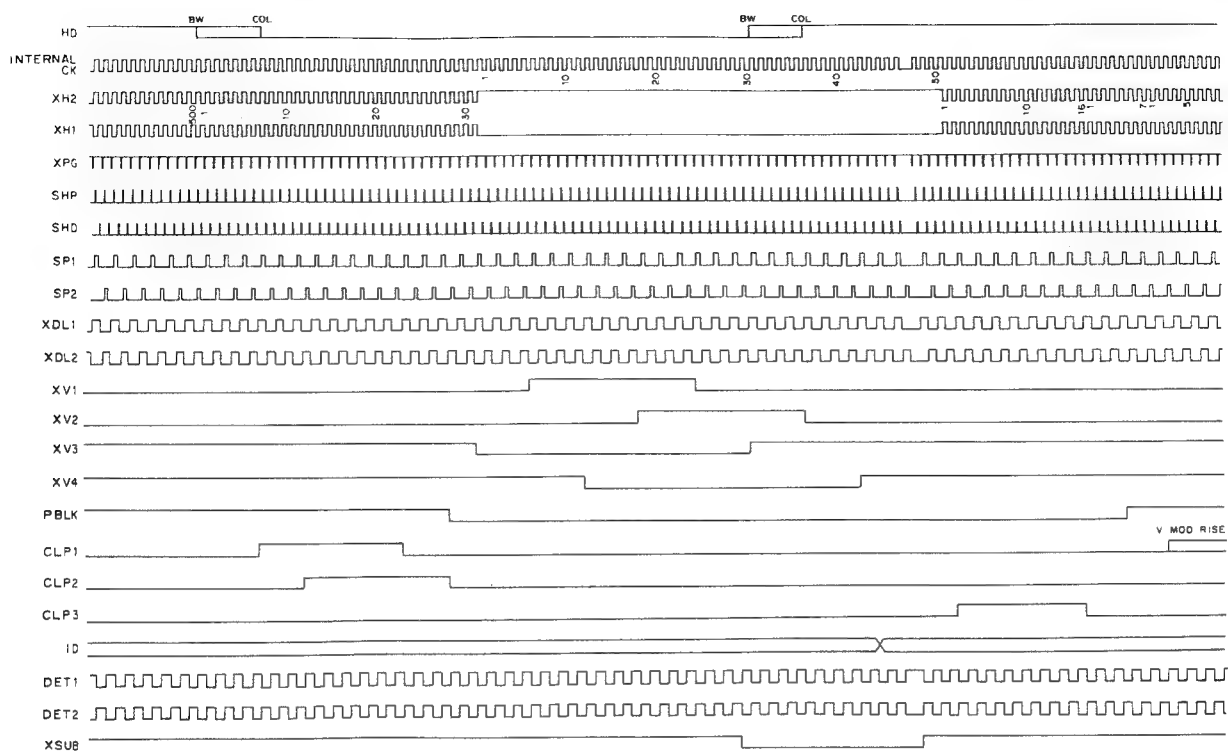
NTSC



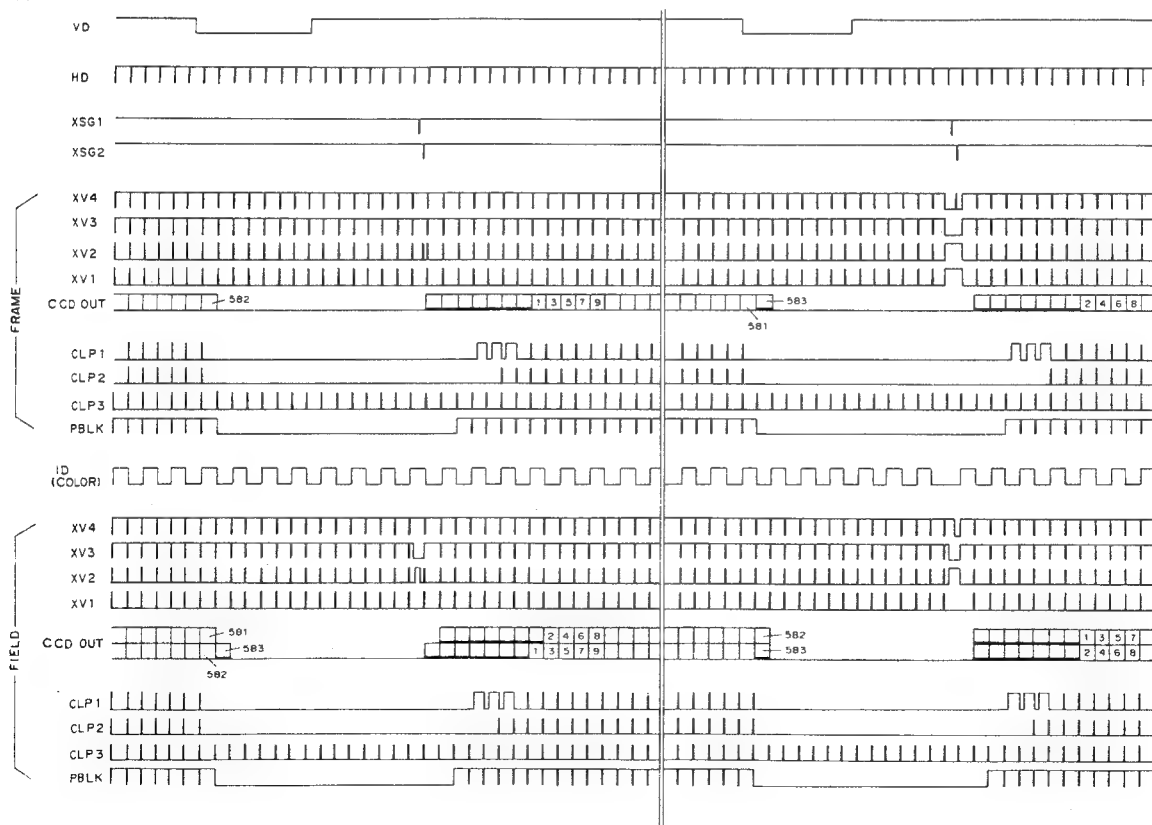
DXC-325(J, UC)
DXC-325P(EK)

B-7

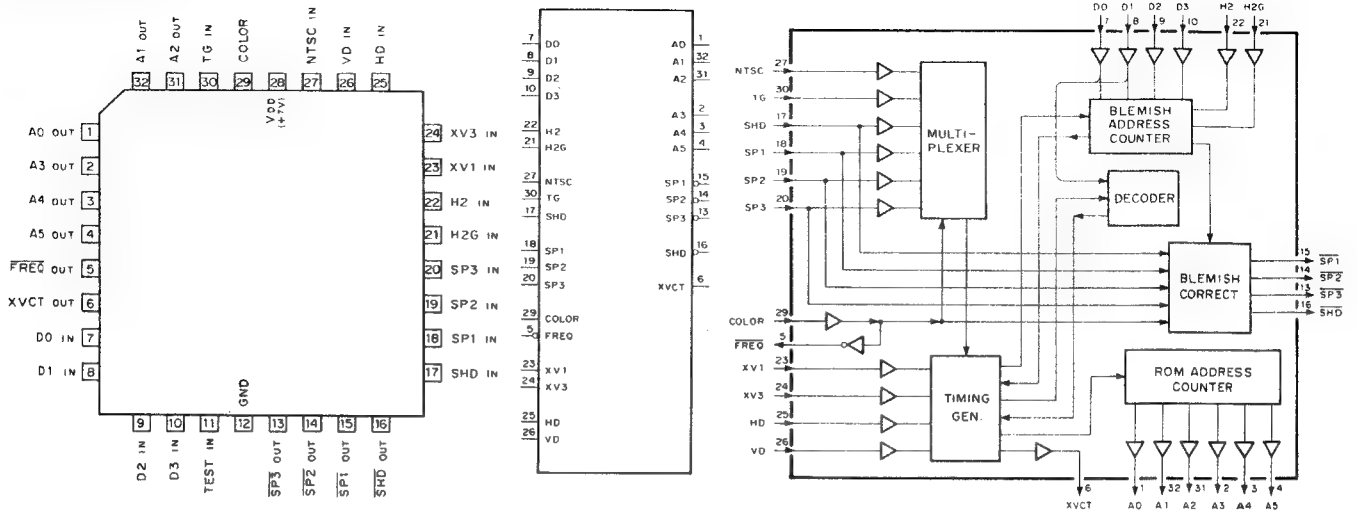
CCIR



CCIR



CXD1251Q (SONY)
C-MOS BLEMISH CORRECTOR FOR CCD IMAGER
- TOP VIEW -



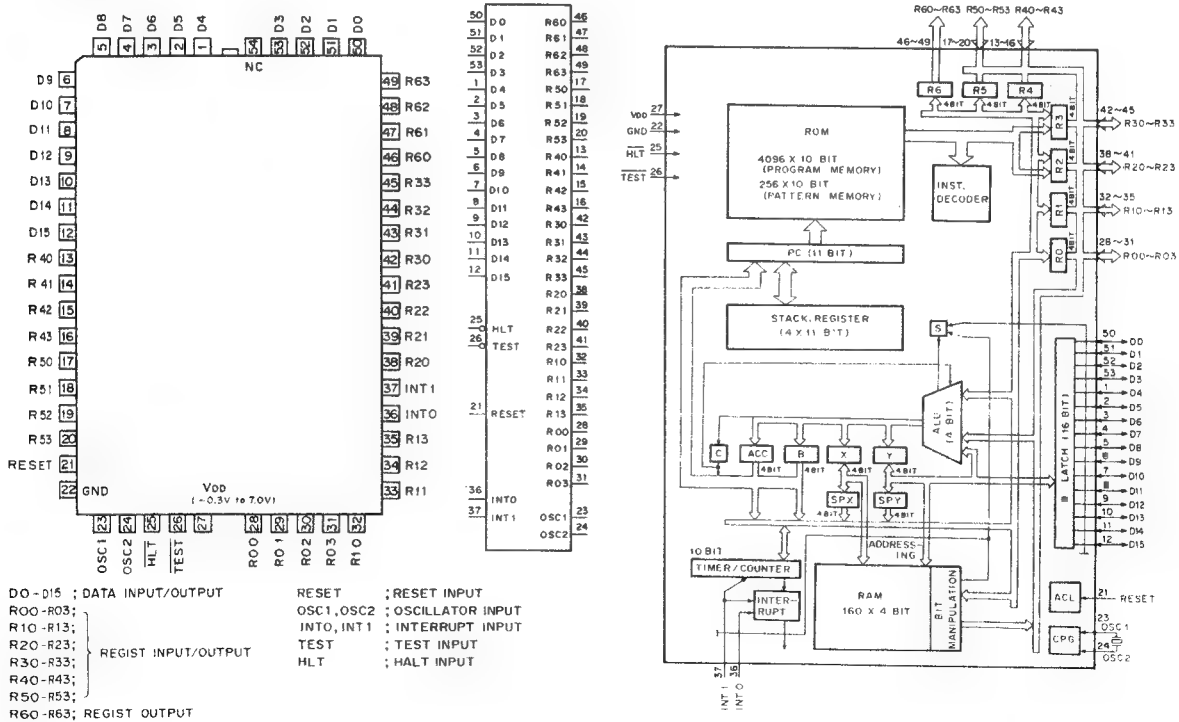
MODE SELECTION

NTSC	CCIR MODE	NTSC MODE
COLOR	B/W MODE	COLOR MODE
TG	IC FOR TG: CXD1149 USE	IC FOR TG: CXD1155/1156 USE

1 ; HIGH LEVEL
0 ; LOW LEVEL

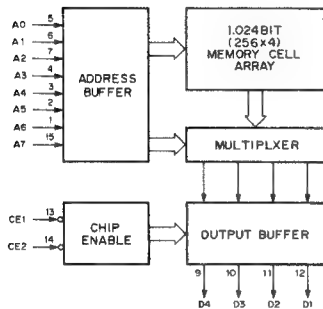
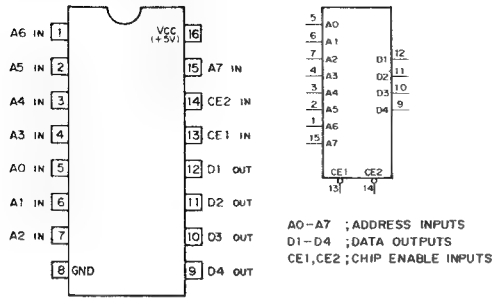
D1-D4 ; EXTERNAL ROM DATA INPUT
A0-A5 ; EXTERNAL ROM ADDRESS OUTPUT
SP1-SP3 ; SAMPLE HOLD PULSE FOR BLEMISH CORRECTION
SHD ; DATA SAMPLE HOLD PULSE
H2,H2G ; CLOCK INPUT FOR HORIZONTAL REGISTER TRANSMISSION
XV1,XV3 ; CLOCK INPUT FOR VERTICAL REGISTER TRANSMISSION
XVCT ; POWER CONTROL OUTPUT FOR EXTERNAL ROM
HD ; HORIZONTAL DRIVE INPUT
VD ; VERTICAL DRIVE INPUT

HD44860B42 (HITACHI) FLAT PACKAGE
C-MOS 4-BIT MICROPROCESSOR
- TOP VIEW -

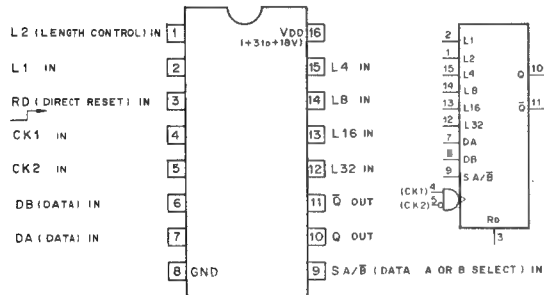


DXC-325(J, UC)
DXC-325P(EK)

MB7114LPF (FUJITSU) (ACCESS TIME = 50ns) FLAT PACKAGE
1024-BIT (256x4) PROM
- TOP VIEW -



MC14557BF (MOTOROLA) FLAT PACKAGE
C-MOS 1-TO-64-BIT VARIABLE LENGTH SHIFT REGISTER
- TOP VIEW -



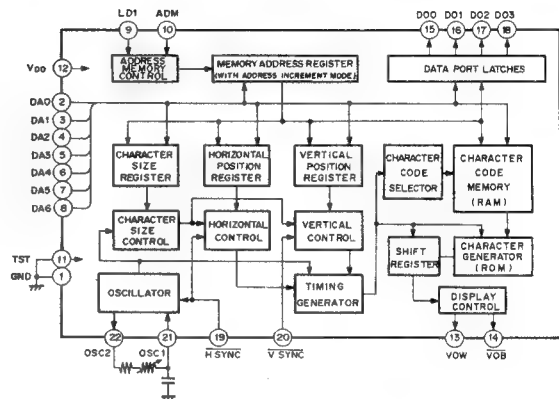
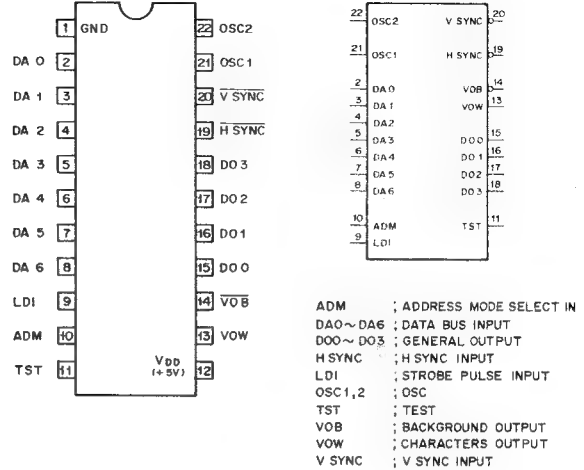
LENGTH SELECT TRUTH TABLE

L32	L16	L8	L4	L2	L1	REGISTER LENGTH
0	0	0	0	0	0	1-BIT
0	0	0	0	0	1	2-BIT
0	0	0	0	1	0	3-BIT
0	0	0	0	1	1	4-BIT
0	0	0	1	0	0	5-BIT
1	1	1	1	0	0	61-BIT
1	1	1	1	0	1	62-BIT
1	1	1	1	1	0	63-BIT
1	1	1	1	1	1	64-BIT

INPUTS				OUTPUT
RD	SA/B	CK1	CK2	Q
0	0	1	0	DB
0	1	1	0	DA
0	0	1	1	DB
0	1	1	1	DA
1	X	X	X	0

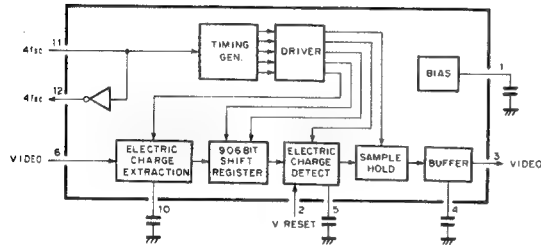
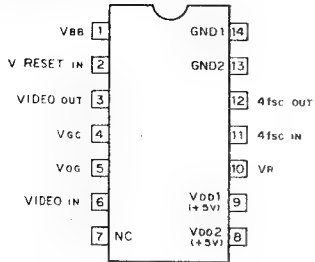
0: LOW LEVEL
 1: HIGH LEVEL
 X: DON'T CARE

MN1237AD (MATSUSHITA)
C-MOS INDICATES DATA OF 60 CHARACTERS CRT INTERFACE
- TOP VIEW -

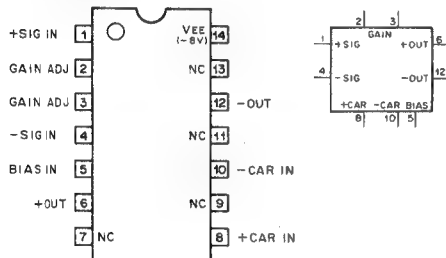


A B C D E F G H I J
 K L M N O P Q R S T
 U V W X Y Z
 0 1 2 3 4 5 6 7 8 9
 . : ; - ? / []

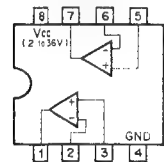
MN3801 (MATSUSHITA)

C-MOS CCD 1H DELAY LINE FOR NTSC
- TOP VIEW -

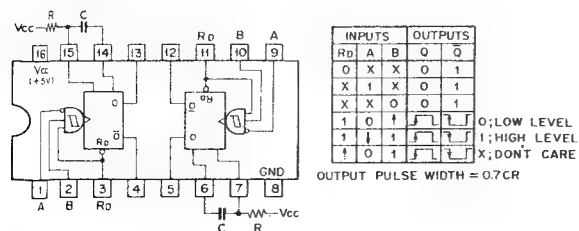
NJM1496M (JRC) FLAT PACKAGE

BALANCED MODULATOR/DEMODULATOR
- TOP VIEW -

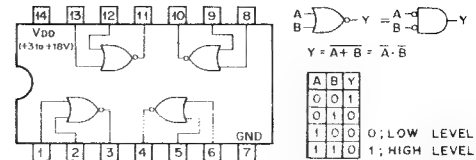
NJM2903M (JRC) FLAT PACKAGE

OPERATIONAL AMPLIFIER
- TOP VIEW -

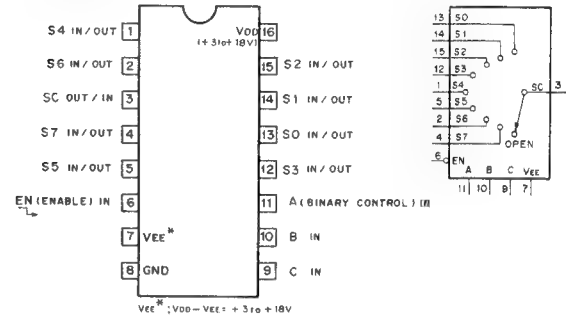
SN74LS221NS (TI) FLAT PACKAGE

TTL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT
- TOP VIEW -DXC-325(J, UC)
DXC-325P(EK)

TC4001BF (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT NOR GATE
- TOP VIEW -

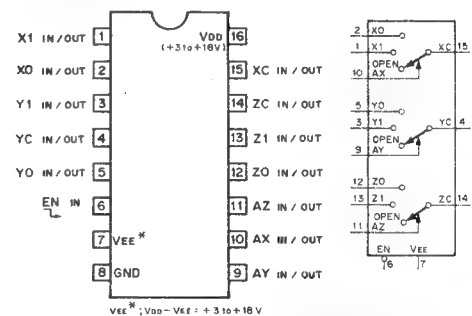
TC4051BF (TOSHIBA) FLAT PACKAGE

C-MOS 8-CHANNEL MULTIPLEXER/DEMUTIPLEXER
- TOP VIEW -

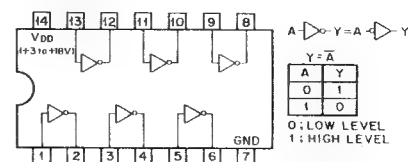
EN	C	B	A	"ON" CHANNEL
0	0	0	0	0
0	0	0	1	1
0	0	1	0	2
0	0	1	1	3
0	1	0	0	4
0	1	0	1	5
0	1	1	0	6
0	1	1	1	7
1	X	X	X	OPEN

TC4053BF (TOSHIBA) FLAT PACKAGE

uPD4053BG (NEC) FLAT PACKAGE

C-MOS 2-CHANNEL MULTIPLEXER/DEMUTIPLEXER
- TOP VIEW -

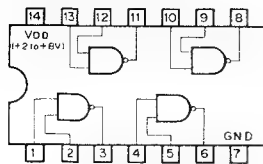
TC4069UBF (TOSHIBA) FLAT PACKAGE

C-MOS INVERTER
- TOP VIEW -

TC40H000F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT NAND GATE

- TOP VIEW -



$$A \text{ --- } B \text{ --- } Y = A \cdot B$$

$$Y = A \cdot B = \overline{\overline{A} + \overline{B}}$$

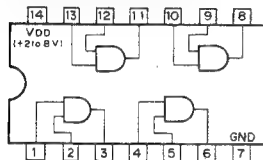
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

TC40H008F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT POSITIVE-AND GATE

- TOP VIEW -



$$A \text{ --- } B \text{ --- } Y = A \cdot B$$

$$Y = A \cdot B = \overline{\overline{A} + \overline{B}}$$

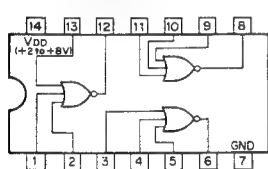
A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

TC40H027F (TOSHIBA) FLAT PACKAGE

C-MOS 3-INPUT POSITIVE-NOR GATE

- TOP VIEW -



$$A \text{ --- } B \text{ --- } C \text{ --- } Y = \overline{A + B + C}$$

$$Y = A + B + C = \overline{\overline{A} \cdot \overline{B} \cdot \overline{C}}$$

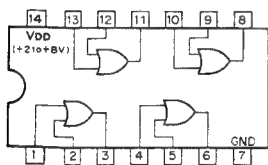
A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

0; LOW LEVEL
1; HIGH LEVEL

TC40H032F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT POSITIVE-OR GATE

- TOP VIEW -



$$A \text{ --- } B \text{ --- } Y = A + B$$

$$Y = A + B = \overline{\overline{A} \cdot \overline{B}}$$

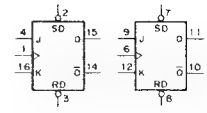
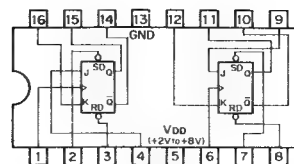
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

TC40H076AF (TOSHIBA) FLAT PACKAGE

C-MOS HIGH SPEED EDGE TRIGGER TYPE J-K FLIP-FLOP WITH DIRECT SET/RESET

- TOP VIEW -



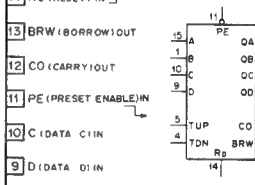
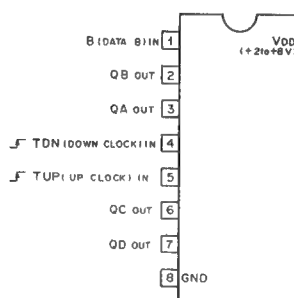
INPUTS					OUTPUTS	
RD	SD	CK	J	K	Q	\bar{Q}
1	0	X	X	X	1	0
0	1	X	X	X	0	1
0	0	X	X	X	1	1
1	1		0	0	NO CHANGE	
1	1		1	0	1	0
1	1		0	1	0	1
1	1		1	1	TOGGLE	
1	1		X	X	NO CHANGE	

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

TC40H193F (TOSHIBA) FLAT PACKAGE

C-MOS PRESETTABLE SYNCHRONOUS 4-BIT UP/DOWN COUNTER

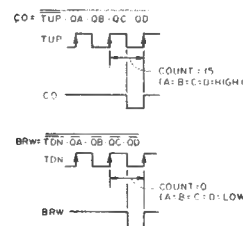
- TOP VIEW -



CONTROL INPUTS				MODE
RD	PE	TUP	TDN	
1	X	X	X	RESET TO ZERO
0	0	X	X	PRESET
0	1	1	1	UP COUNT
0	1	1	0	DOWN COUNT
0	1	1	1	NO COUNT

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

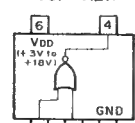
COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

UP COUNT
DOWN COUNT

TC4S01F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT NOR GATE

- TOP VIEW -



$$A \text{ --- } B \text{ --- } Y = \overline{A + B}$$

$$Y = A + B = \overline{\overline{A} \cdot \overline{B}}$$

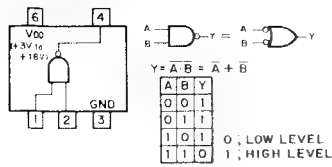
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

TC4S11F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT HAND GATE

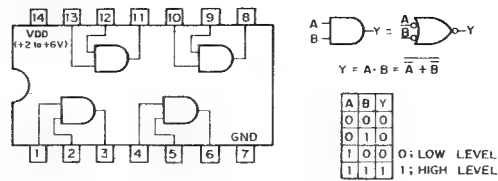
- TOP VIEW -



TC74HC08F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT AND GATE

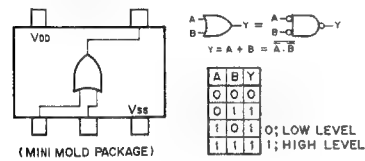
- TOP VIEW -



TC4S71F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT OR GATE

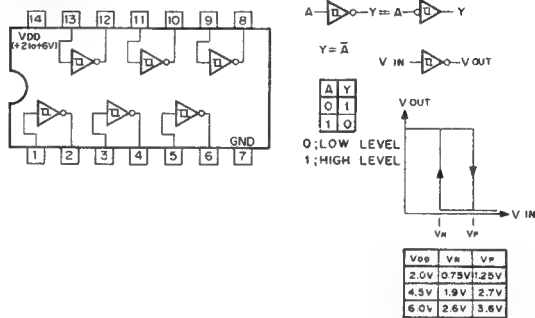
- TOP VIEW -



TC74HC14F (TOSHIBA) FLAT PACKAGE

C-MOS SCHMITT TRIGGER INVERTER

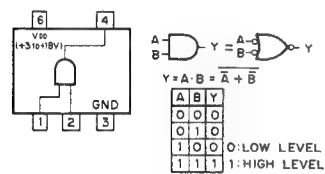
- TOP VIEW -



TC4S81F (TOSHIBA) FLAT PACKAGE

C-MOS 2-INPUT AND GATE

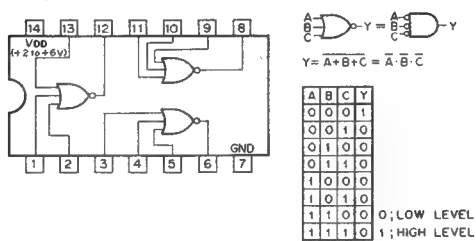
- TOP VIEW -



TC74HC27F (TOSHIBA) FLAT PACKAGE

C-MOS 3-LINE POSITIVE-NOR GATE

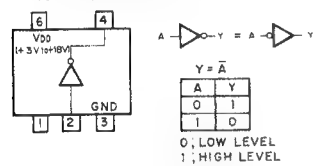
- TOP VIEW -



TC4SU69F (TOSHIBA) FLAT PACKAGE

C-MOS INVERTER BUFFER

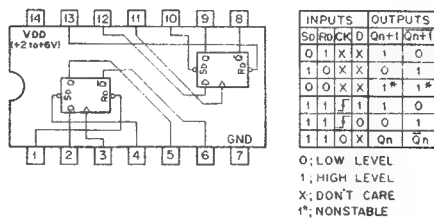
- TOP VIEW -



TC74HC74F (TOSHIBA) FLAT PACKAGE

C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET

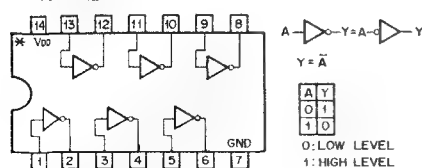
- TOP VIEW -



TC74HC04F (TOSHIBA) FLAT PACKAGE

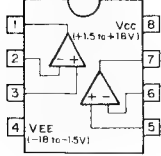
C-MOS INVERTER

- TOP VIEW -

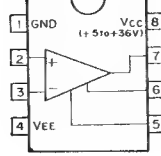


* V_{DD} HC, HCU: +2 to +6V
HCT: +5V

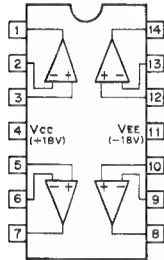
TL062ACPS (TI) FLAT PACKAGE
OPERATIONAL AMPLIFIER
(JFET INPUT)
- TOP VIEW -



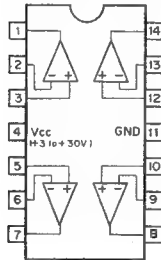
uPC311G2 (NEC) FLAT PACKAGE
VOLTAGE COMPARATOR
- TOP VIEW -



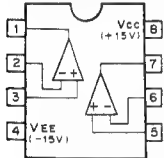
TL064CNS (TI) FLAT PACKAGE
OPERATIONAL AMPLIFIER
(J FET-INPUT)
- TOP VIEW -



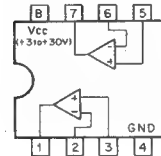
uPC324G2 (NEC) FLAT PACKAGE
QUAD. OP. AMPLIFIER
- TOP VIEW -



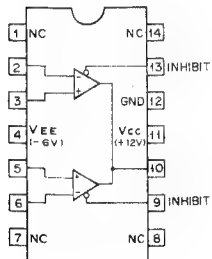
TL082CPS (TI) FLAT PACKAGE
OPERATIONAL AMPLIFIER
(J FET-INPUT)
- TOP VIEW -



uPC358G2 (NEC) FLAT PACKAGE
DUAL OPERATIONAL AMPLIFIERS
- TOP VIEW -



uA711CNS (TI)
VOLTAGE COMPARATOR
- TOP VIEW -



IE-23

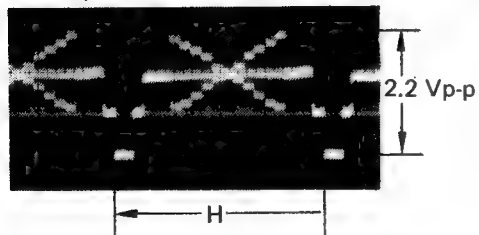
NOTE:

1. All voltage are dc, measured with a digital voltmeter. (input impedance: $10M\Omega$)
2. All waveforms are taken and DC voltage is measured in condition below.
 - . Set camera FILTER selector to 1 position.
 - . Set camera BARS/WB selector to 3200°K position.
 - . Set camera GAIN selector to 0dB position.
 - . Set camera S1 switch/IE-23 board (DTL ON/OFF) to ON position.
 - . Shoot the grayscale chart. Adjust lens iris so that a white level is 100IRE (For NTSC) or 700mV (For PAL) on the waveform monitor.

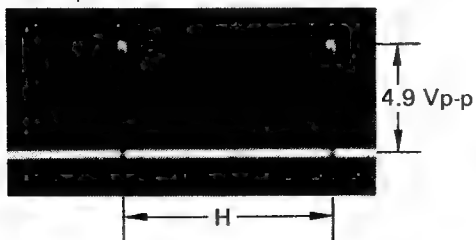
CN1-1pin



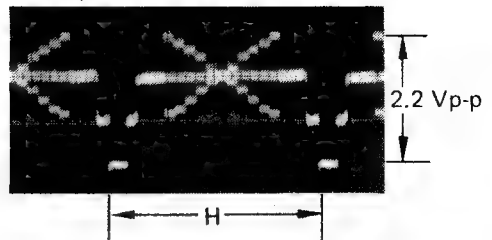
CN2-3 pin



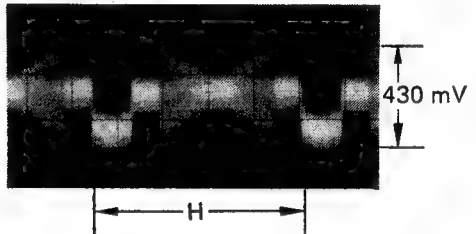
CN1-5pin



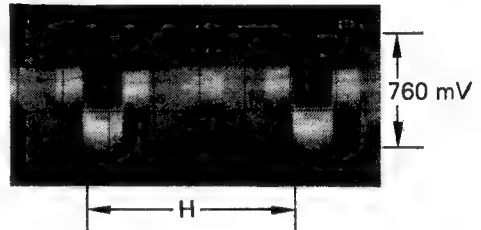
CN2-2pin



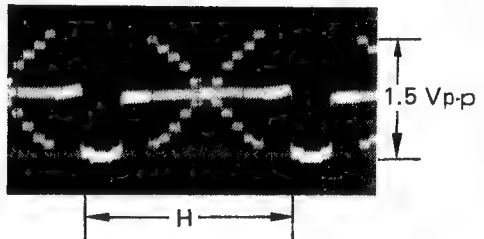
IC1-6pin



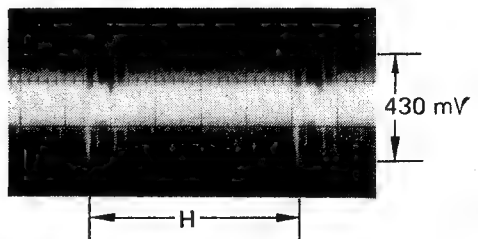
IC1-3pin



TP1



TP4

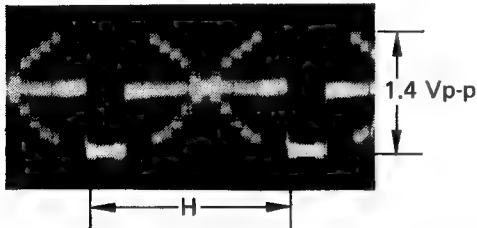


AT-53

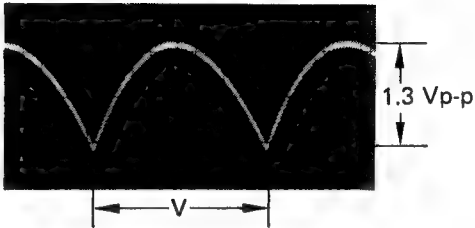
NOTE:

1. All voltage are dc, measured with a digital voltmeter. (input impedance: 10MΩ)
2. All waveforms are taken in condition below.
- . Shoot the grayscale pattern on the pattern box. Adjust lens iris so that a white level is 100IRE (For NTSC) or 700mV (For PAL) using the waveform monitor.

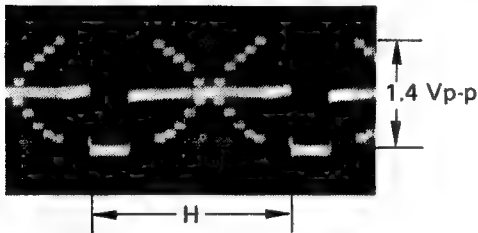
CN2-5, 6, 7



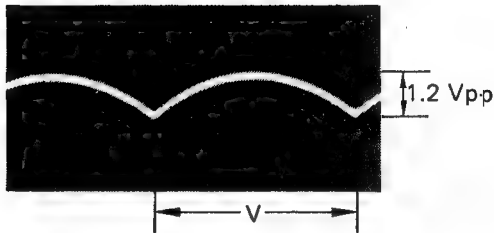
IC7-1pin



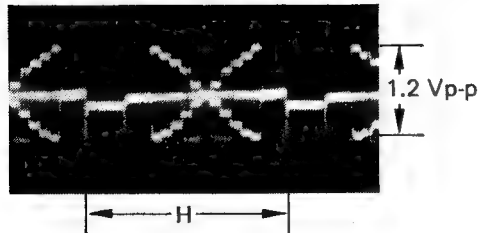
Q13-emitter



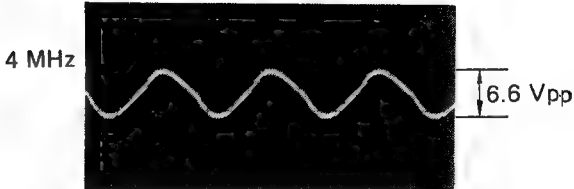
IC7-7pin



IC4-12pin

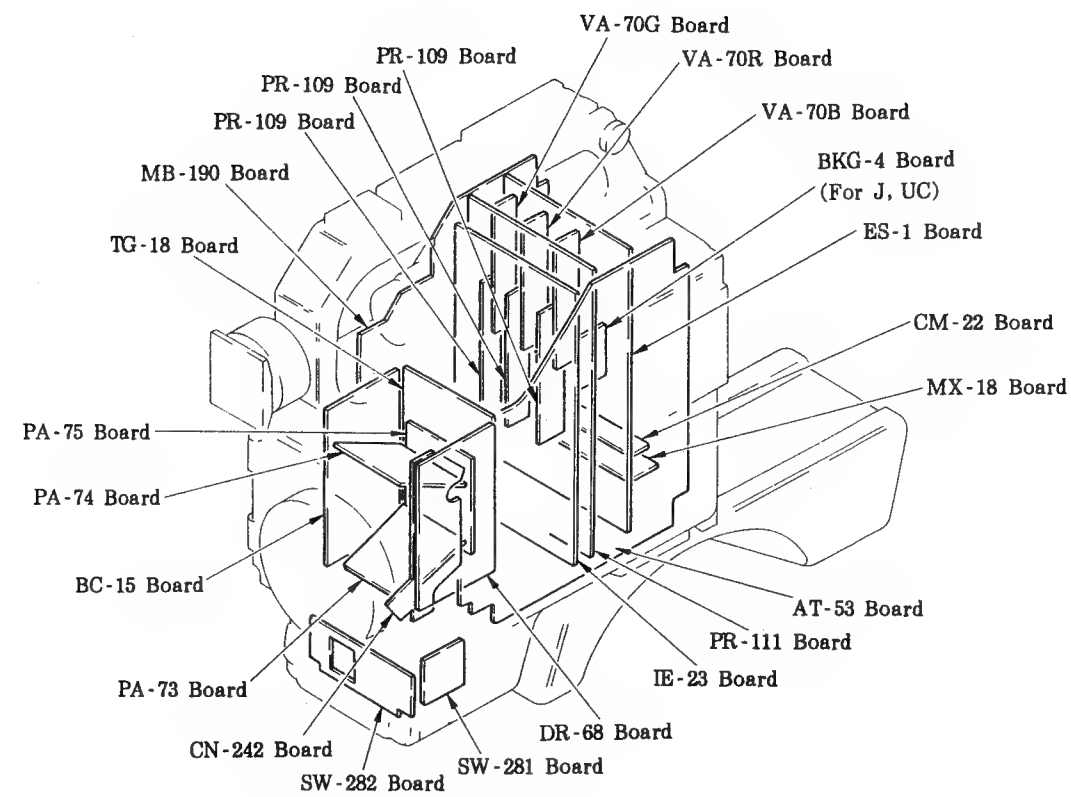


IC9-23pin



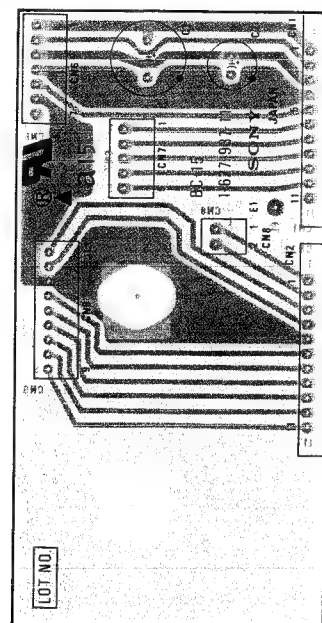
SECTION C

SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS



BC-15 BOARD

Ser.NO.10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



1-627-937-11 COMPONENT SIDE

C-3 (a)

BC-15, DR-68, TG-38

BC-15, DR-68, TG-38

TG-38 BOARD

Ser.NO.10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)

TG-38 (1-627-932-11)

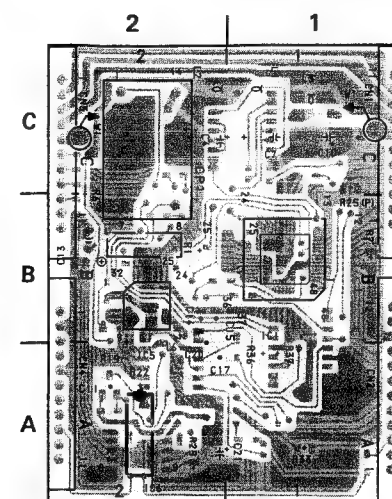
CN1 C-1
CN2 A-1
CN3 C-2
CN4 A-2

CP1 C-2

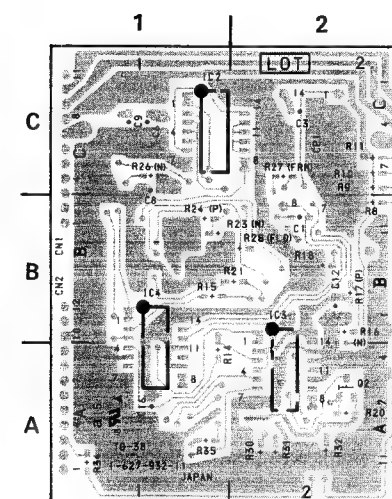
D13 B-2

IC1 B-1
IC2 C-1
IC3 A-2
IC4 A-1
IC5 B-2
IC6 A-2

Q2 A-2



1-627-932-11 COMPONENT SIDE



1-627-932-11 SOLDERING SIDE

DR-68 BOARD

Ser.NO.10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)

DR-68 (1-627-927-11)

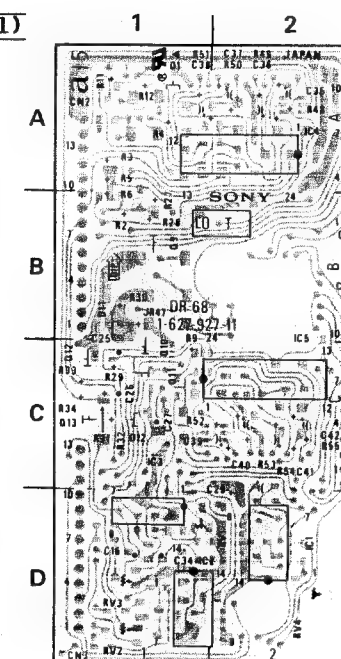
CN1 A-2
CN2 B-1
CN3 D-1
CN4 C-2

D1 A-1
D2 A-1
D3 A-2
D4 C-1
D5 C-2
D6 A-1
D7 A-2
D8 C-2
D9 D-1
D11 B-1
D12 C-1

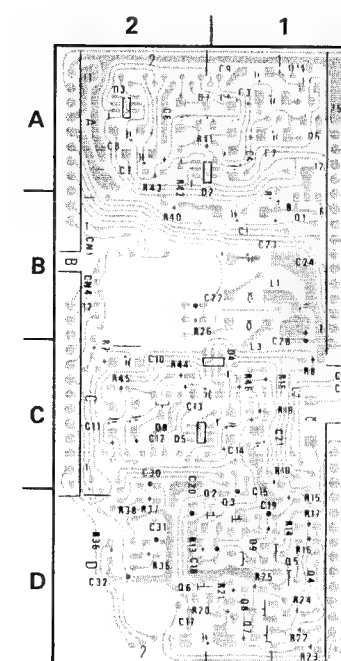
IC1 D-2
IC2 D-1
IC3 D-1
IC4 A-2
IC5 C-2

Q1 B-1
Q2 D-1
Q3 D-1
Q4 D-1
Q5 D-1
Q6 D-2
Q7 D-1
Q8 D-1
Q9 B-1
Q10 C-1
Q11 C-1
Q12 C-1
Q13 C-1
Q14 A-1

RV1 D-1
RV2 D-1
RV3 D-1
RV4 D-2



1-627-927-11 COMPONENT SIDE



1-627-927-11 SOLDERING SIDE

C-4 (a)

DXC-325 (J, UC)
DXC-325P (EK)

BC-15, DR-68, TG-38

BC-15, DR-68, TG-38

BC-15 BOARD

Ser. NO. 11721- (UC)
 30841- (J)
 42531- (EK)

TG-38 BOARD

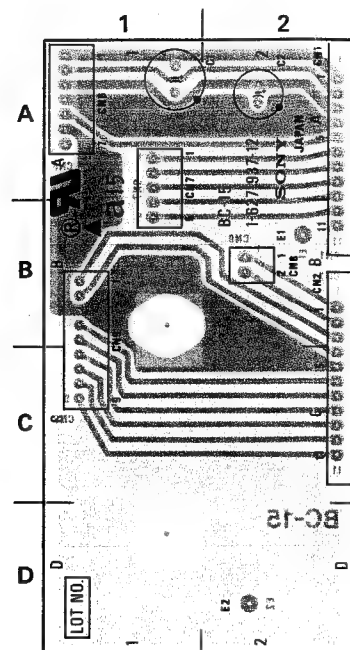
Ser. NO. 11721- (UC)
 30841- (J)
 42531- (EK)

DR-68 BOARD

Ser. NO. 11721- (UC)
 30841- (J)
 42531- (EK)

BC-15 (1-627-937-12)

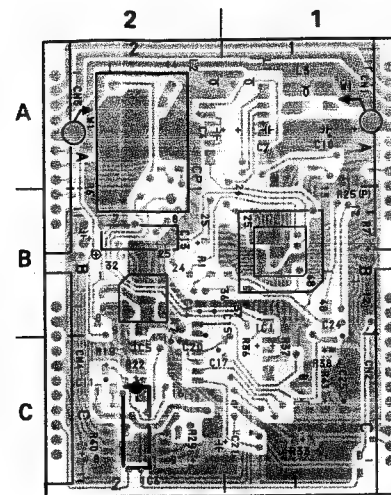
CN1 A-2
 CN2 C-2
 CN6 A-1
 CN7 A-1
 CN8 B-2
 CN9 B-1



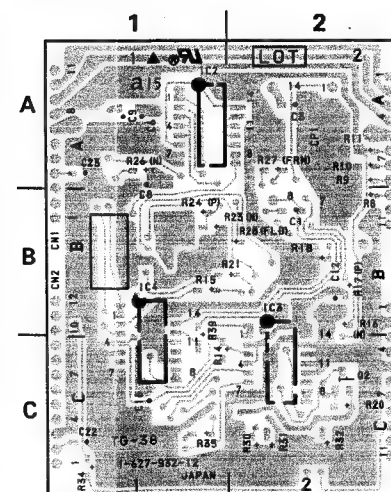
1-627-937-12 COMPONENT SIDE

TG-38 (1-627-932-12)

CN1 A-1
 CN2 C-1
 CN3 A-2
 CN4 C-2
 CP1 A-2
 D1 C-1
 IC1 B-1
 IC2 A-1
 IC3 C-2
 IC4 C-1
 IC5 B-2
 IC6 C-2
 Q2 C-2



1-627-932-12 COMPONENT SIDE



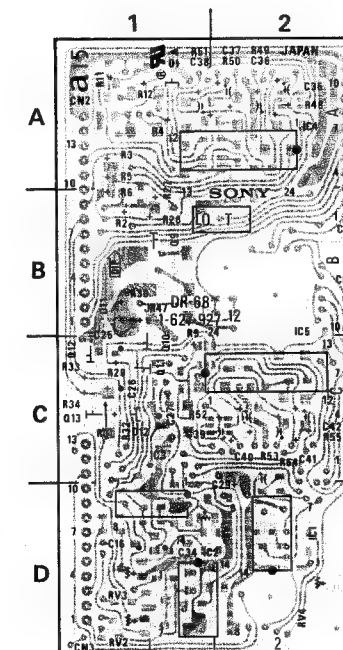
1-627-932-12 SOLDERING SIDE

DR-68 (1-627-927-12)

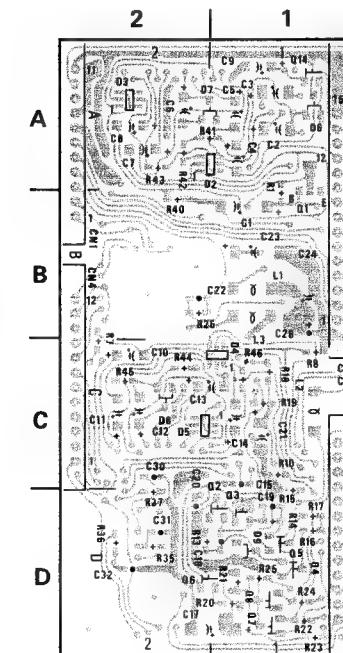
CN1 A-2
 CN2 B-1
 CN3 D-1
 CN4 C-2
 E1 B-2
 D1 A-1
 D2 A-1
 D3 A-2
 D4 C-1
 D5 C-2
 D6 A-1
 D7 A-2
 D8 C-2
 D9 D-1
 D11 B-1
 D12 C-1
 IC1 D-2
 IC2 D-1
 IC3 D-1
 IC4 A-2
 IC5 C-2

Q1 B-1
 Q2 D-1
 Q3 D-1
 Q4 D-1
 Q5 D-1
 Q6 D-2
 Q7 D-1
 Q8 D-1
 Q9 B-1
 Q10 C-1
 Q11 C-1
 Q12 C-1
 Q13 C-1
 Q14 A-1

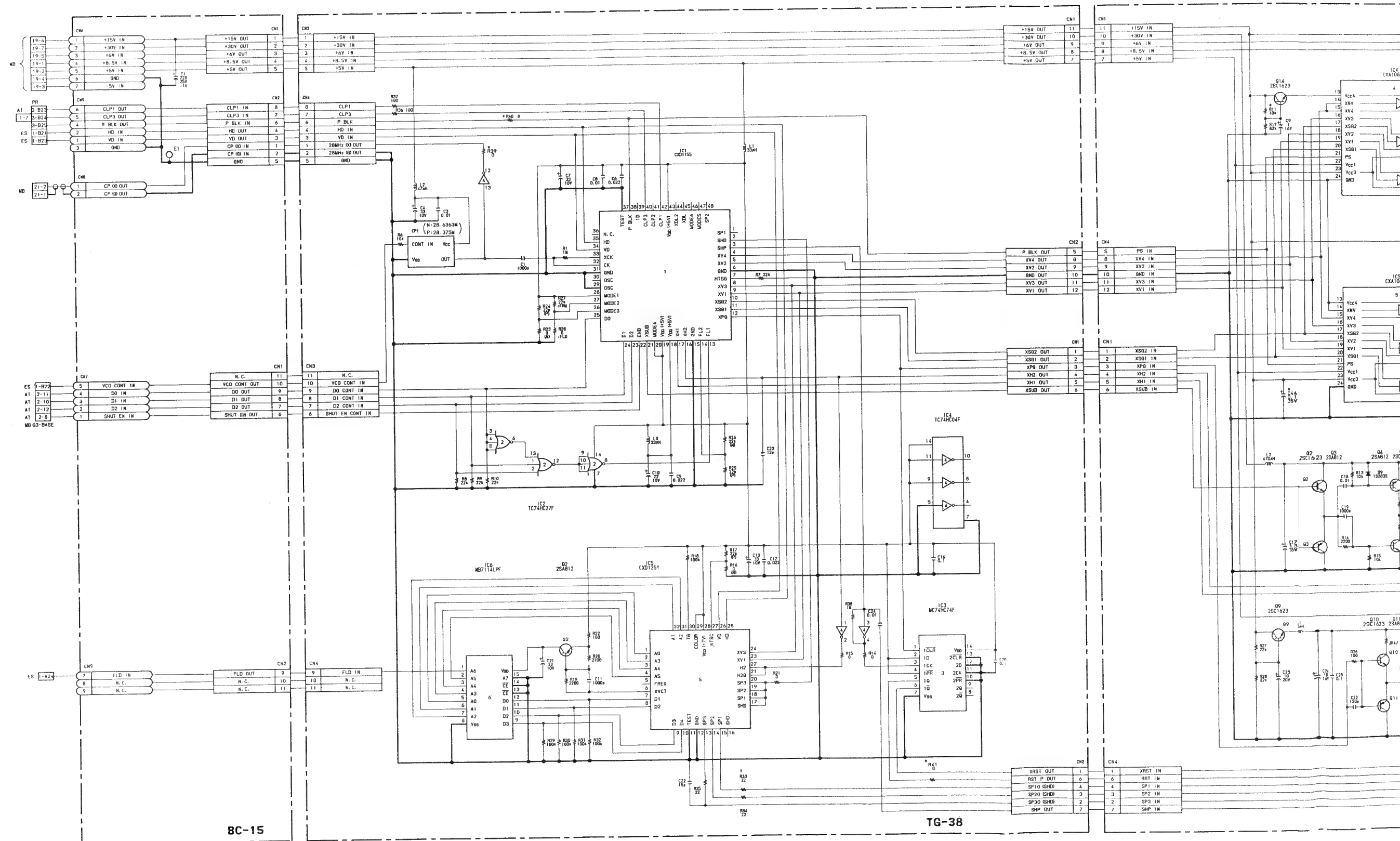
RV1 D-1
 RV2 D-1
 RV3 D-1
 RV4 D-2
 TP1 C-1
 TP2 D-2
 TP3 D-1
 TP4 C-1
 TP5 C-1



1-627-927-12 COMPONENT SIDE

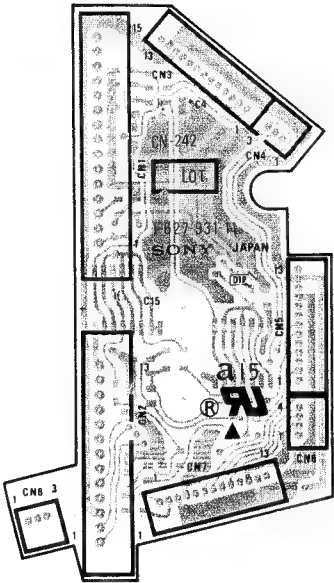


1-627-927-12 SOLDERING SIDE

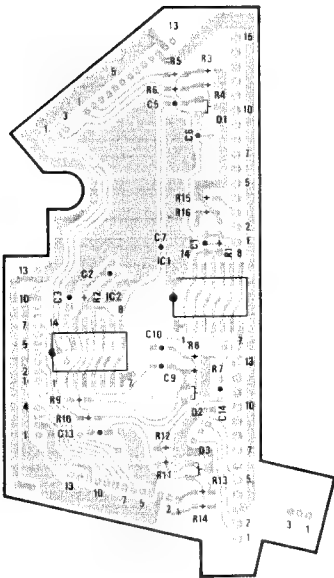


CN-242 BOARD

Ser .NO.10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



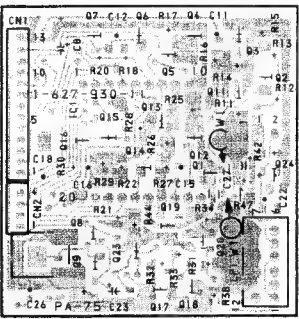
1-627-931-11 COMPONENT SIDE



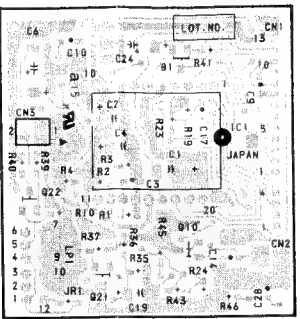
1-627-931-11 SOLDERING SIDE

PA-75 BOARD

Ser .NO.10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



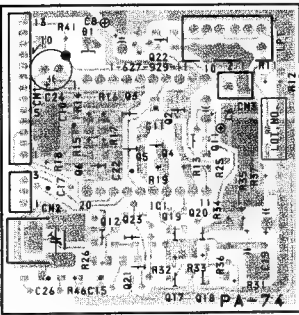
1-627-930-11 COMPONENT SIDE



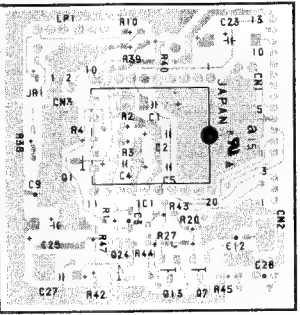
1-627-930-11 SOLDERING SIDE

PA-74 BOARD

Ser .NO.10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



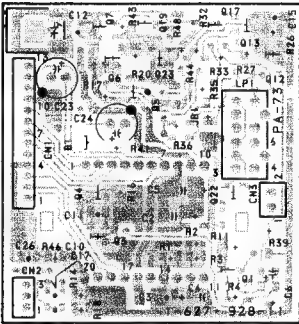
1-627-929-11 COMPONENT SIDE



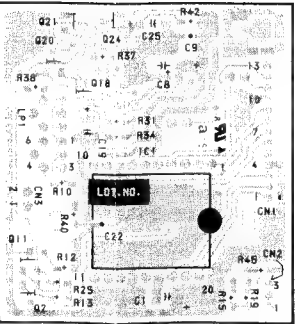
1-627-929-11 SOLDERING SIDE

PA-73 BOARD

Ser .NO.10001-11720 (UC)
30001-30840 (J)
40001-42530 (EK)



1-627-928-11 COMPONENT SIDE

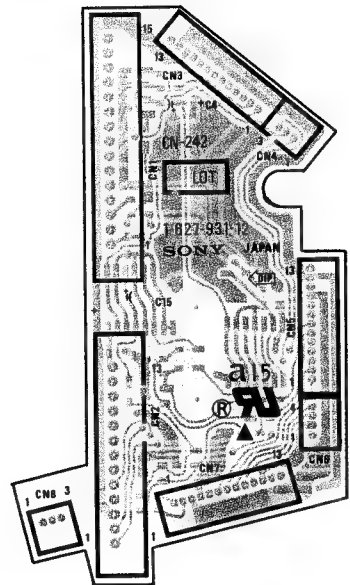


1-627-928-11 SOLDERING SIDE

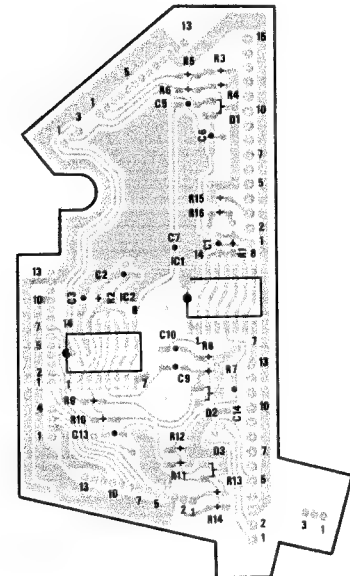
CN-242 BOARD

Ser .NO.11721-
30841-
42531-

(UC)
(J)
(EK)



1-627-931-12 COMPONENT SIDE

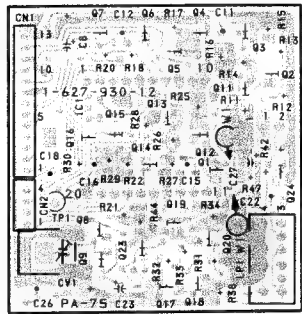


1-627-931-12 SOLDERING SIDE

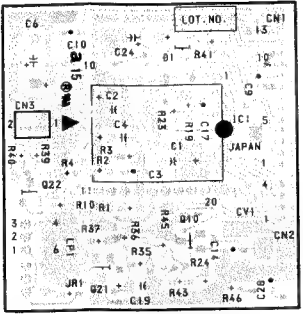
PA-75 BOARD

Ser .NO.11721-
30841-
42531-

(UC)
(J)
(EK)



1-627-930-12 COMPONENT SIDE

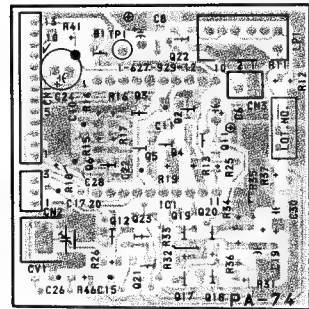


1-627-930-12 SOLDERING SIDE

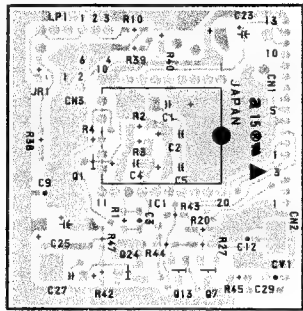
PA-74 BOARD

Ser .NO.11721-
30841-
42531-

(UC)
(J)
(EK)



1-627-929-12 COMPONENT SIDE

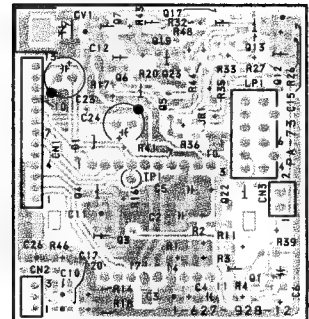


1-627-929-12 SOLDERING SIDE

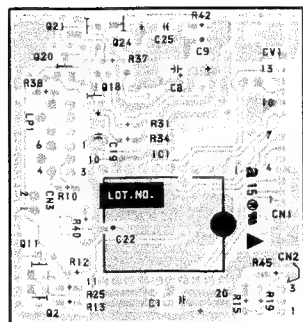
PA-73 BOARD

Ser .NO.11721-
30841-
42531-

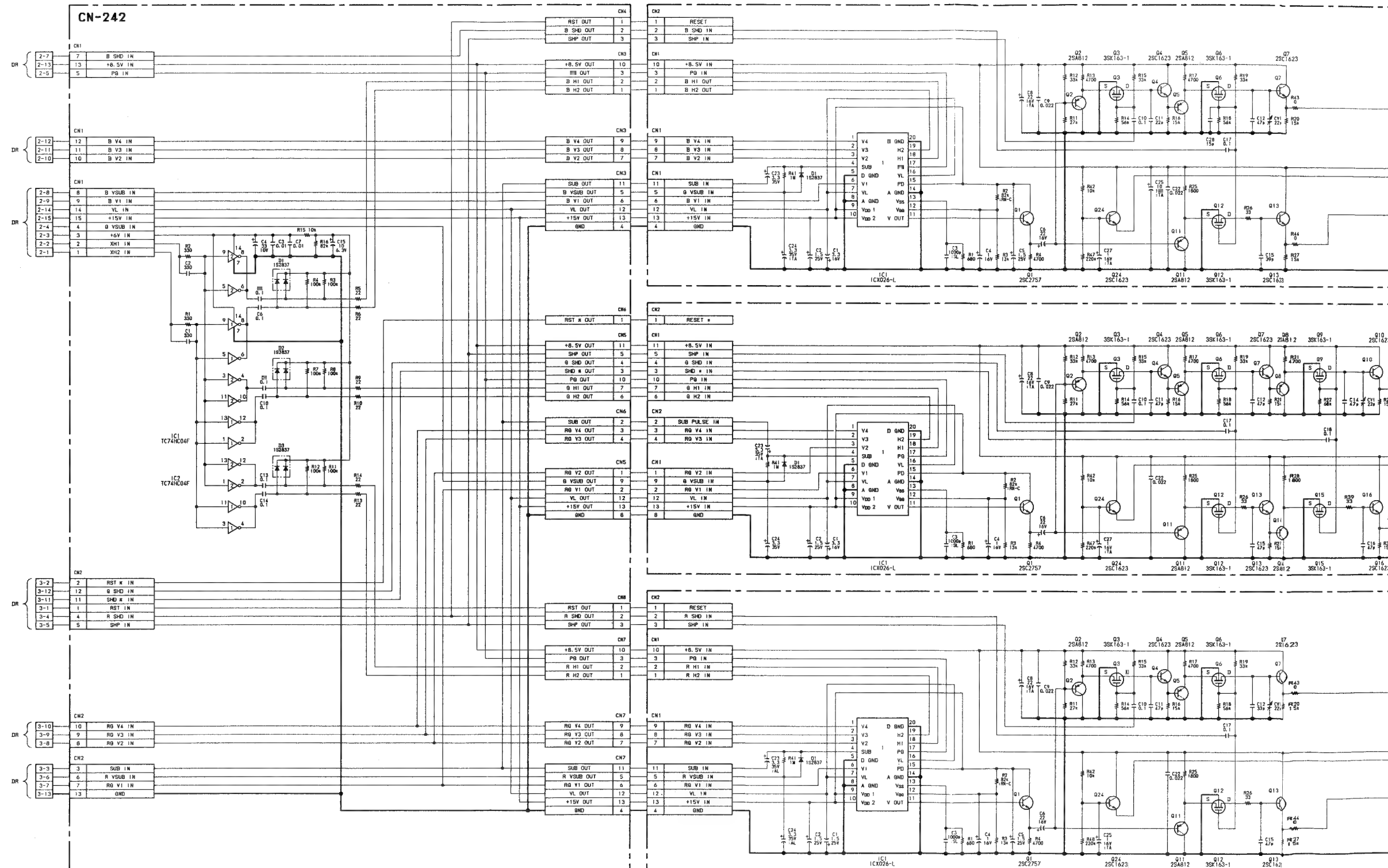
(UC)
(J)
(EK)

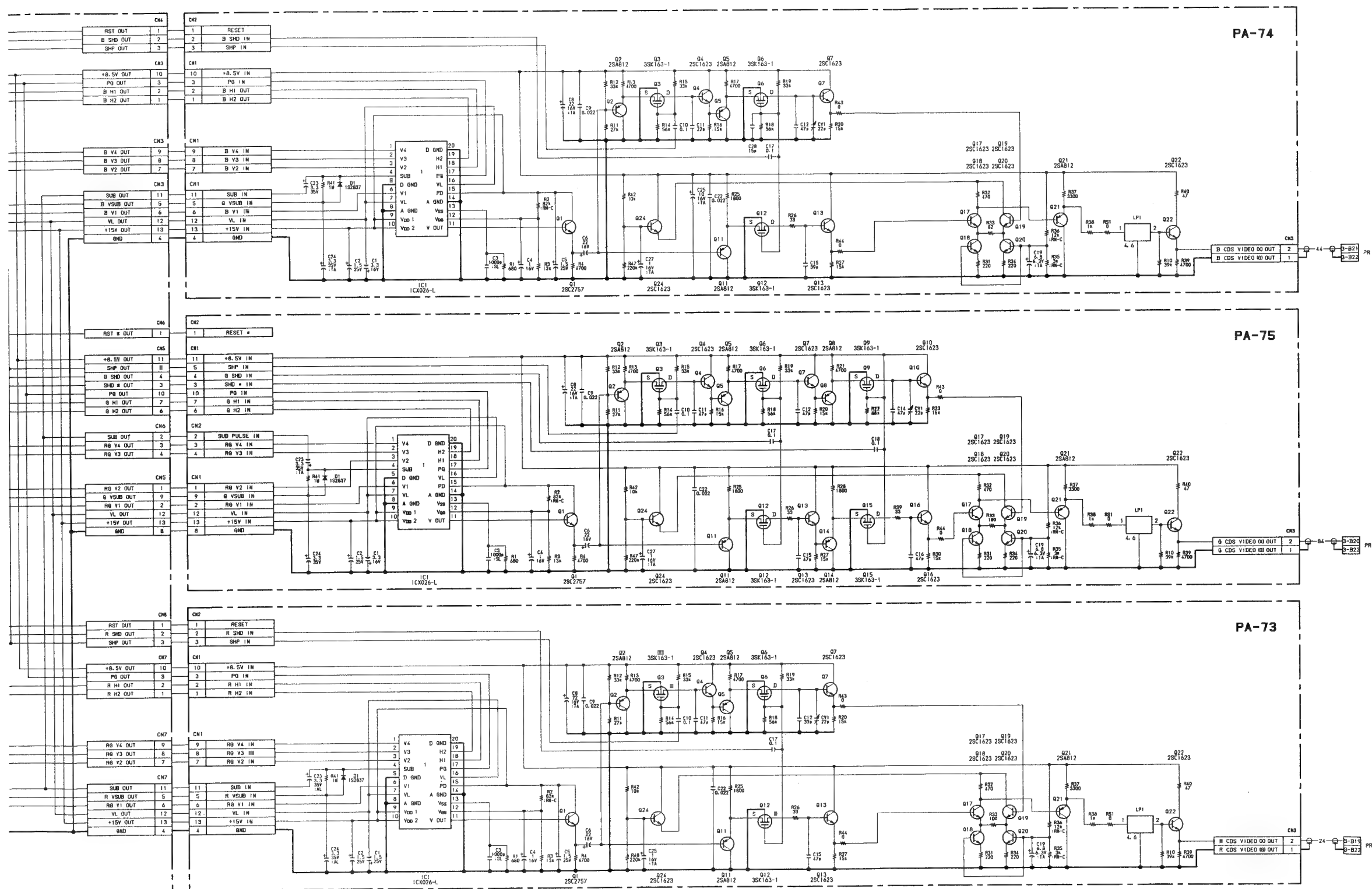


1-627-928-12 COMPONENT SIDE



1-627-928-12 SOLDERING SIDE





Ser.No.10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)

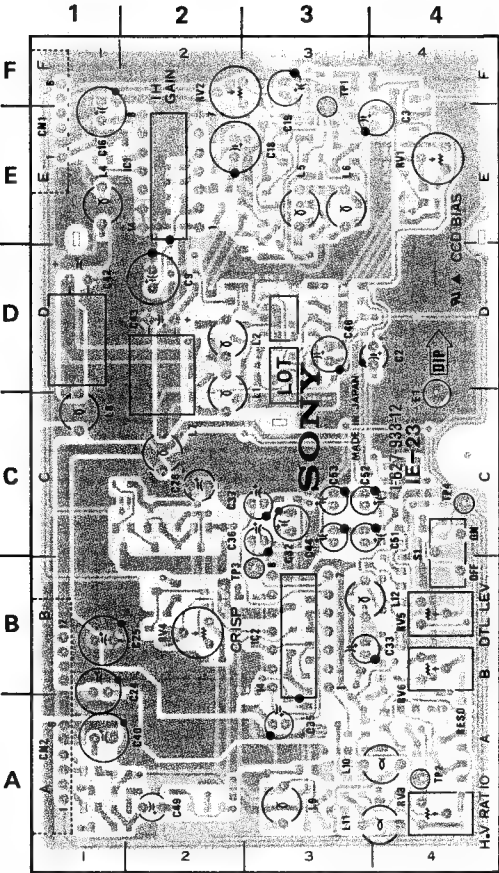
IE-23



IE-23

IE-23 (1-627-933-11,12)

- | | |
|-----|-----|
| CN1 | E-1 |
| CN2 | A-1 |
| | |
| D1 | C-2 |
| D2 | A-3 |
| | |
| E1 | C-4 |
| | |
| IC1 | E-2 |
| IC2 | B-3 |
| IC3 | C-1 |
| | |
| Q1 | A-1 |
| Q3 | E-4 |
| Q4 | E-4 |
| Q5 | D-3 |
| Q6 | D-3 |
| Q7 | D-3 |
| Q8 | D-3 |
| Q9 | D-3 |
| Q10 | E-2 |
| Q12 | E-3 |
| Q13 | A-1 |
| Q14 | A-4 |
| Q15 | A-3 |
| Q16 | A-3 |
| Q17 | A-4 |
| Q18 | B-4 |
| Q19 | B-4 |
| Q20 | B-3 |
| Q21 | B-2 |
| Q22 | B-3 |
| Q23 | B-3 |
| Q24 | C-4 |
| Q25 | C-1 |
| Q27 | C-2 |
| Q28 | F-4 |
| Q29 | D-3 |
| Q30 | D-3 |
| Q31 | D-2 |
| Q32 | E-3 |
| Q33 | E-3 |
| Q34 | E-3 |
| Q35 | D-3 |
| Q36 | E-3 |
| Q37 | A-2 |
| Q38 | A-2 |
| Q39 | A-4 |
| Q40 | A-4 |
| Q41 | A-4 |
| Q42 | A-4 |
| Q43 | D-3 |
| Q44 | C-4 |
| | |
| RV1 | E-4 |
| RV2 | F-2 |
| RV3 | A-4 |
| RV4 | B-2 |
| RV5 | B-4 |
| RV6 | B-4 |
| | |
| S1 | C-4 |
| | |
| TP1 | E-3 |
| TP2 | A-4 |
| TP3 | B-3 |
| TP4 | C-4 |

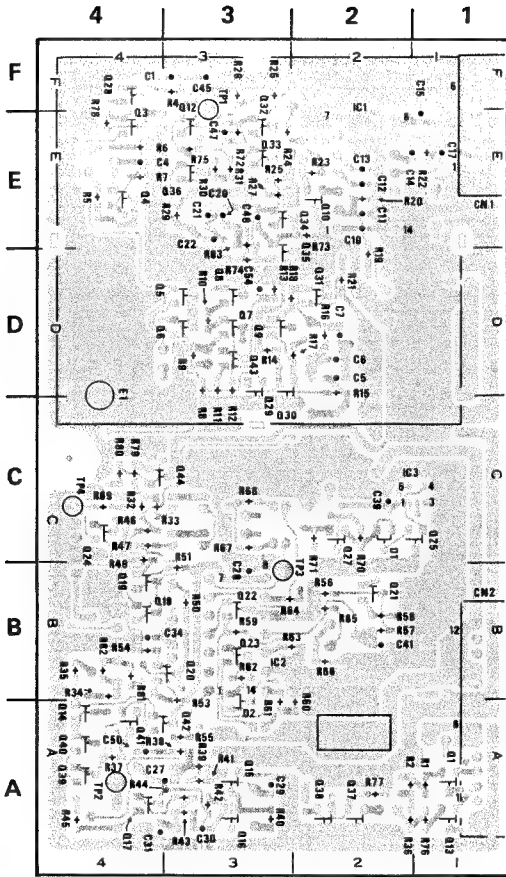


1-627-933-11 COMPONENT SIDE

C-15 (a)

IE-23 (1-627-933-11,12)

- | | |
|-----|-----|
| CN1 | E-1 |
| CN2 | A-1 |
| | |
| D1 | C-2 |
| D2 | A-3 |
| | |
| E1 | C-4 |
| | |
| IC1 | E-2 |
| IC2 | B-3 |
| IC3 | C-1 |
| | |
| Q1 | A-1 |
| Q3 | E-4 |
| Q4 | E-4 |
| Q5 | D-3 |
| Q6 | D-3 |
| Q7 | D-3 |
| Q8 | D-3 |
| Q9 | D-3 |
| Q10 | E-2 |
| Q12 | E-3 |
| Q13 | A-1 |
| Q14 | A-4 |
| Q15 | A-3 |
| Q16 | A-3 |
| Q17 | A-4 |
| Q18 | B-4 |
| Q19 | B-4 |
| Q20 | B-3 |
| Q21 | B-2 |
| Q22 | B-3 |
| Q23 | B-3 |
| Q24 | C-4 |
| Q25 | C-1 |
| Q27 | C-2 |
| Q28 | F-4 |
| Q29 | D-3 |
| Q30 | D-3 |
| Q31 | D-2 |
| Q32 | E-3 |
| Q33 | E-3 |
| Q34 | E-3 |
| Q35 | D-3 |
| Q36 | E-3 |
| Q37 | A-2 |
| Q38 | A-2 |
| Q39 | A-4 |
| Q40 | A-4 |
| Q41 | A-4 |
| Q42 | A-4 |
| Q43 | D-3 |
| Q44 | C-4 |
| | |
| RV1 | E-4 |
| RV2 | F-2 |
| RV3 | A-4 |
| RV4 | B-2 |
| RV5 | B-4 |
| RV6 | B-4 |
| | |
| S1 | C-4 |
| | |
| TP1 | E-3 |
| TP2 | A-4 |
| TP3 | B-3 |
| TP4 | C-4 |



1-627-933-11 SOLDERING SIDE

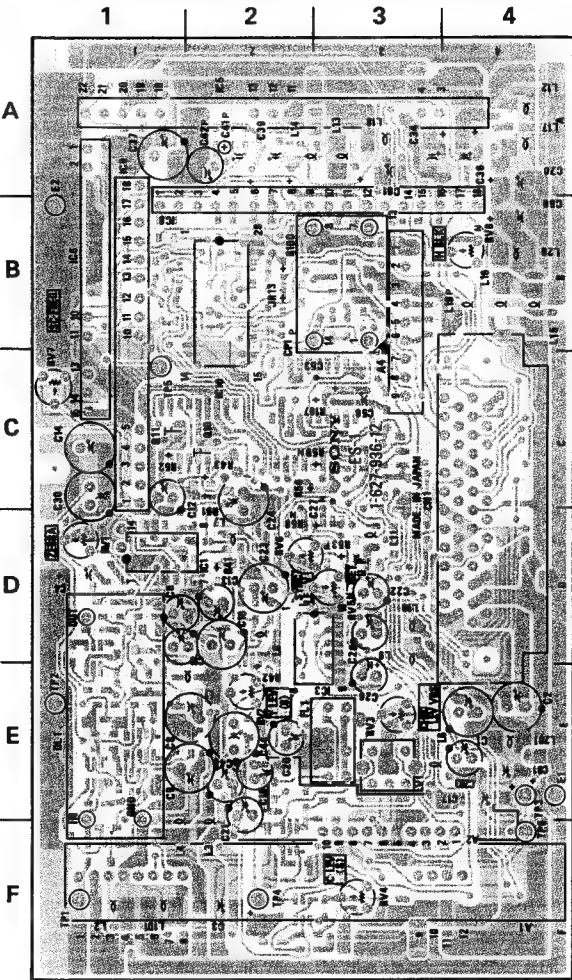
C-16 (a)

DXC-325 (J, UC)
DXC-325P (EK)

Ser.No.11271- (UC)
30811- (J)
42081- (EK)

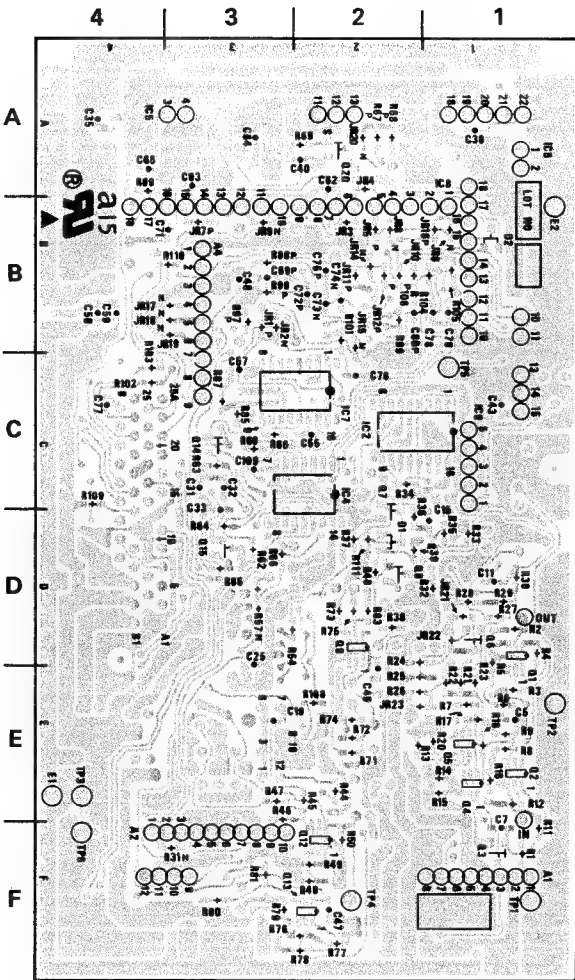
IE-23 (1-627-933-11,12)

- | | |
|-----|-----|
| CN1 | E-1 |
| CN2 | A-1 |
| | |
| D1 | C-2 |
| D2 | A-3 |
| | |
| E1 | C-4 |
| | |
| IC1 | E-2 |
| IC2 | B-3 |
| IC3 | C-1 |
| | |
| Q1 | A-1 |
| Q3 | E-4 |
| Q4 | E-4 |
| Q5 | D-3 |
| Q6 | D-3 |
| Q7 | D-3 |
| Q8 | D-3 |
| Q9 | D-3 |
| Q10 | E-2 |
| Q12 | E-3 |
| Q13 | A-1 |
| Q14 | A-4 |
| Q15 | A-3 |
| Q16 | A-3 |
| Q17 | A-4 |
| Q18 | B-4 |
| Q19 | B-4 |
| Q20 | B-3 |
| Q21 | B-2 |
| Q22 | B-3 |
| Q23 | B-3 |
| Q24 | C-4 |
| Q25 | C-1 |
| Q27 | C-2 |
| Q28 | F-4 |
| Q29 | D-3 |
| Q30 | D-3 |
| Q31 | D-2 |
| Q32 | E-3 |
| Q33 | E-3 |
| Q34 | E-3 |
| Q35 | D-3 |
| Q36 | E-3 |
| Q37 | A-2 |
| Q38 | A-2 |
| Q39 | A-4 |
| Q40 | A-4 |
| Q41 | A-4 |
| Q42 | A-4 |
| Q43 | D-3 |
| Q44 | C-4 |
| | |
| RV1 | E-4 |
| RV2 | F-2 |
| RV3 | A-4 |
| RV4 | B-2 |
| RV5 | B-4 |
| RV6 | B-4 |
| | |
| S1 | C-4 |
| | |
| TP1 | E-3 |
| TP2 | A-4 |
| TP3 | B-3 |
| TP4 | C-4 |



1-627-936-12 COMPONENT SIDE

C-15 (b)

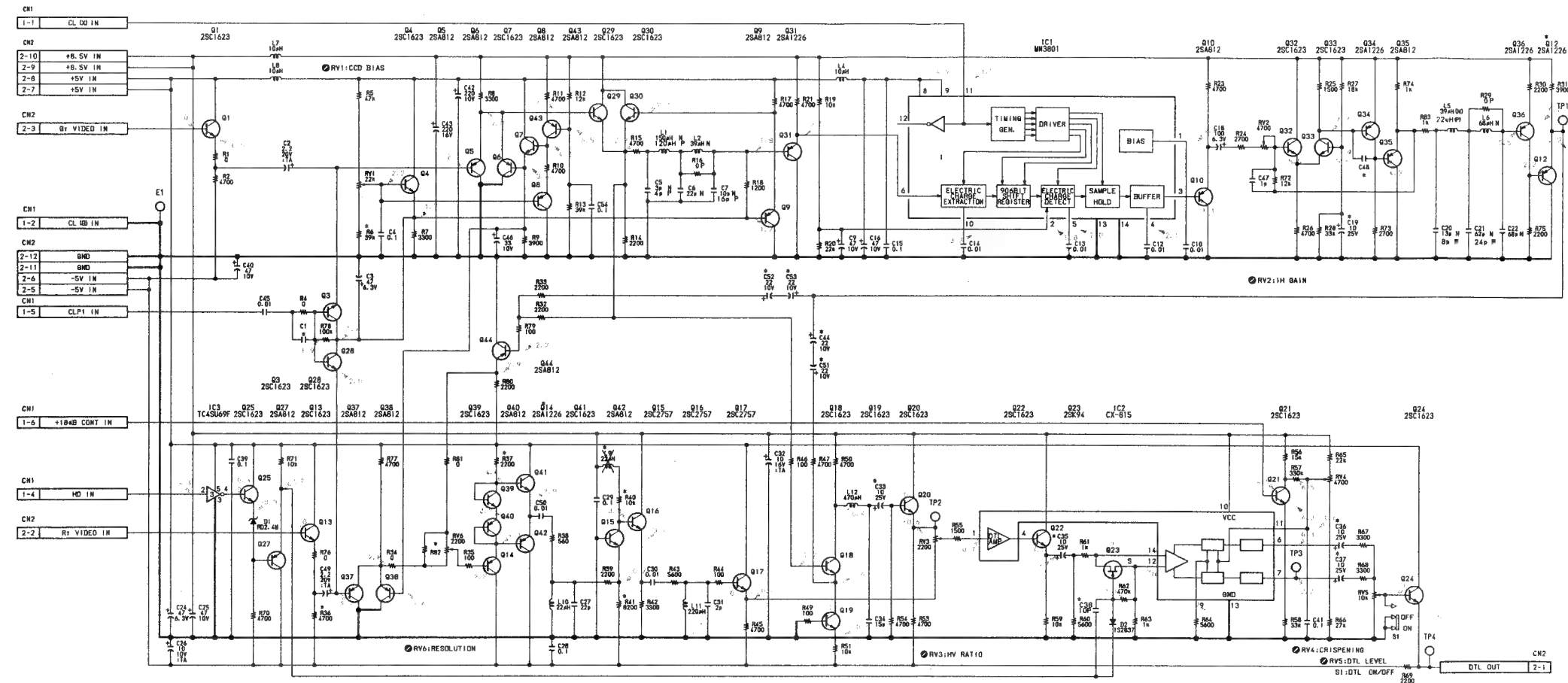


1-627-936-12 SOLDERING SIDE

C-16 (b)

IE-23 (1-627-933-11,12)

- | | |
|-----|-----|
| CN1 | E-1 |
| CN2 | A-1 |
| | |
| D1 | C-2 |
| D2 | A-3 |
| | |
| E1 | C-4 |
| | |
| IC1 | E-2 |
| IC2 | B-3 |
| IC3 | C-1 |
| | |
| Q1 | A-1 |
| Q3 | E-4 |
| Q4 | E-4 |
| Q5 | D-3 |
| Q6 | D-3 |
| Q7 | D-3 |
| Q8 | D-3 |
| Q9 | D-3 |
| Q10 | E-2 |
| Q12 | E-3 |
| Q13 | A-1 |
| Q14 | A-4 |
| Q15 | A-3 |
| Q16 | A-3 |
| Q17 | A-4 |
| Q18 | B-4 |
| Q19 | B-4 |
| Q20 | B-3 |
| Q21 | B-2 |
| Q22 | B-3 |
| Q23 | B-3 |
| Q24 | C-4 |
| Q25 | C-1 |
| Q27 | C-2 |
| Q28 | F-4 |
| Q29 | D-3 |
| Q30 | D-3 |
| Q31 | D-2 |
| Q32 | E-3 |
| Q33 | E-3 |
| Q34 | E-3 |
| Q35 | D-3 |
| Q36 | E-3 |
| Q37 | A-2 |
| Q38 | A-2 |
| Q39 | A-4 |
| Q40 | A-4 |
| Q41 | A-4 |
| Q42 | A-4 |
| Q43 | D-3 |
| Q44 | C-4 |
| | |
| RV1 | E-4 |
| RV2 | F-2 |
| RV3 | A-4 |
| RV4 | B-2 |
| RV5 | B-4 |
| RV6 | B-4 |
| | |
| S1 | C-4 |
| | |
| TP1 | E-3 |
| TP2 | A-4 |
| TP3 | B-3 |
| TP4 | C-4 |



* CHANGE INFORMATION			
REF. NO	DESCRIPTION	EFFECTIVE	SER. NO
Q12	2SA812 → 2SA1226	19821 - RUC 21821 - EIC	
R6	47K → 39K		
R39	1K → 1.5K		
R40	500Ω → 220Ω		
R41	500Ω → 220Ω		
Q14	2SA812 → 2SA1226	11371 - RUC 22081 - EIC	
L9	22μH → DELETE		
55, 36, 37	DMF/16V → DMF/25V		
C44, 51	22MF/4.5V → 22MF/10V		
C52, 53	10P → ADD		
C38			

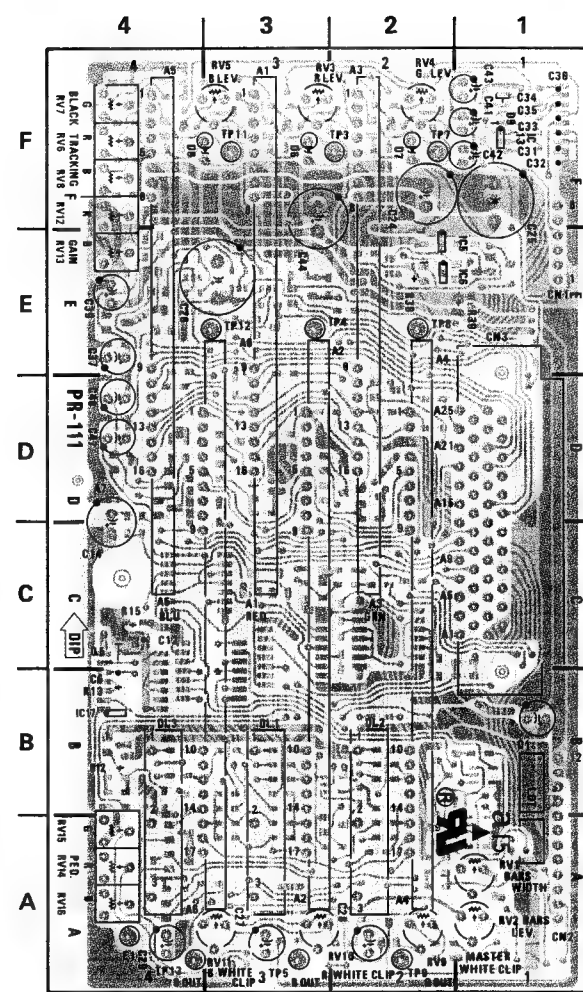
IE-23 BOARD

PR-111 BOARD

Ser.No. 10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)

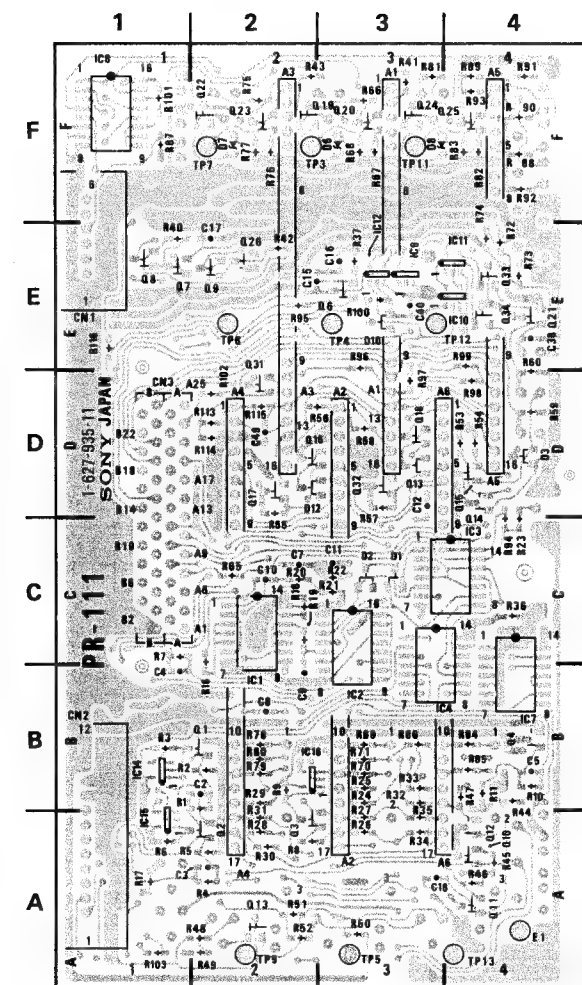
PR-111 (1-627-935-11,12)

CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
		TP11	F-3
Q1	B-2	TP12	E-3
Q2	A-2	TP13	A-4
Q3	A-2		
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		



1-627-935-11 COMPONENT SIDE

C-20 (a)



1-627-935-11 SOLDERING SIDE

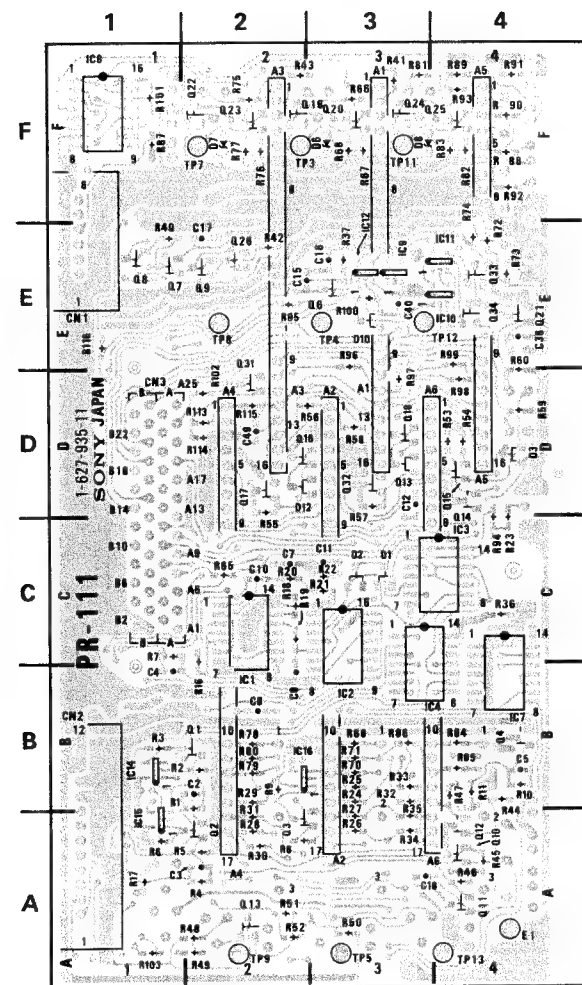
C-21 (a)

PR-111 (1-627-935-11,12)

CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
Q1	B-2	TP11	F-3
Q2	A-2	TP12	E-3
Q3	A-2	TP13	A-4
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		

VA-70 BOARD

Ser.No. 10001-11270 (UC)
 30001-30810 (J)
 40001-42080 (EK)



1-627-935-11 SOLDERING SIDE

PR-111 (1-627-935-11,12)

CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
		Q20	F-3
D1	C-3	Q21	E-4
D2	C-3	Q22	F-2
D3	D-4	Q23	F-2
D6	F-3	Q24	F-3
D7	F-2	Q25	F-4
D8	F-3	Q26	E-2
D9	F-1	Q31	D-2
D10	E-3	Q32	D-3
D12	D-2	Q33	E-4
D13	D-3	Q34	E-4
DL1	A-3		
DL2	A-2		
DL3	A-4		
		RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
		RV6	F-4
IC1	C-2	RV7	F-4
IC2	C-3	RV8	F-4
IC3	C-4	RV9	A-2
IC4	B-3	RV10	A-3
IC5	E-2	RV11	A-3
IC6	E-2	RV12	F-4
IC7	B-4	RV13	E-4
IC8	F-1	RV14	A-4
IC9	E-3	RV15	A-4
IC10	E-4	RV16	A-4
IC11	E-4		
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
		TP11	F-3
Q1	B-2	TP12	E-3
Q2	A-2	TP13	A-4
Q3	A-2		
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		



1-627-925-11 COMPONENT SIDE



1-627-925-11 SOLDERING SIDE

PR-109 BOARD

Ser.No. 10001-11270 (UC)
 30001-30810 (J)
 40001-42080 (EK)



1-627-926-11 COMPONENT SIDE



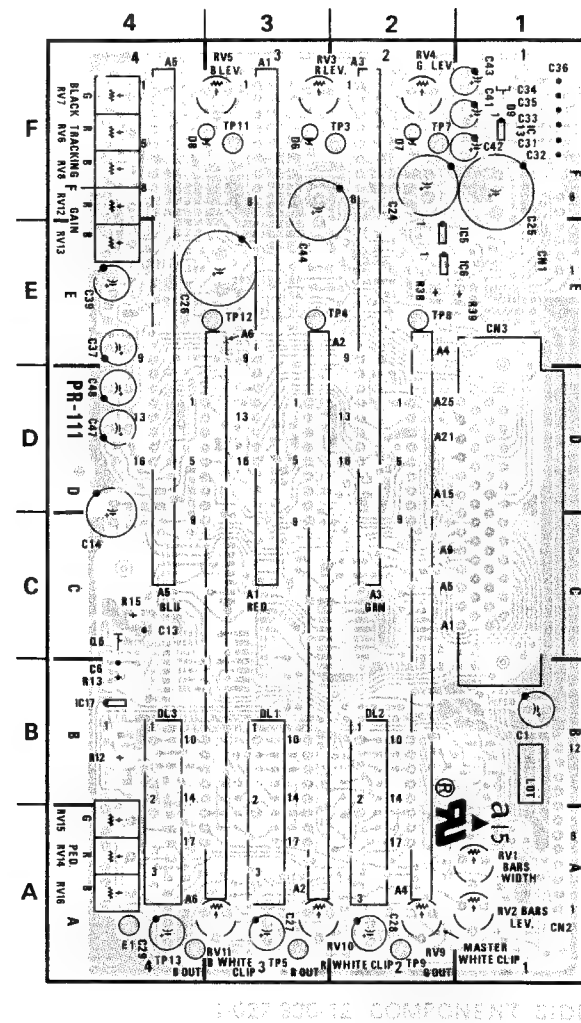
1-627-926-11 SOLDERING SIDE

PR-111 BOARD

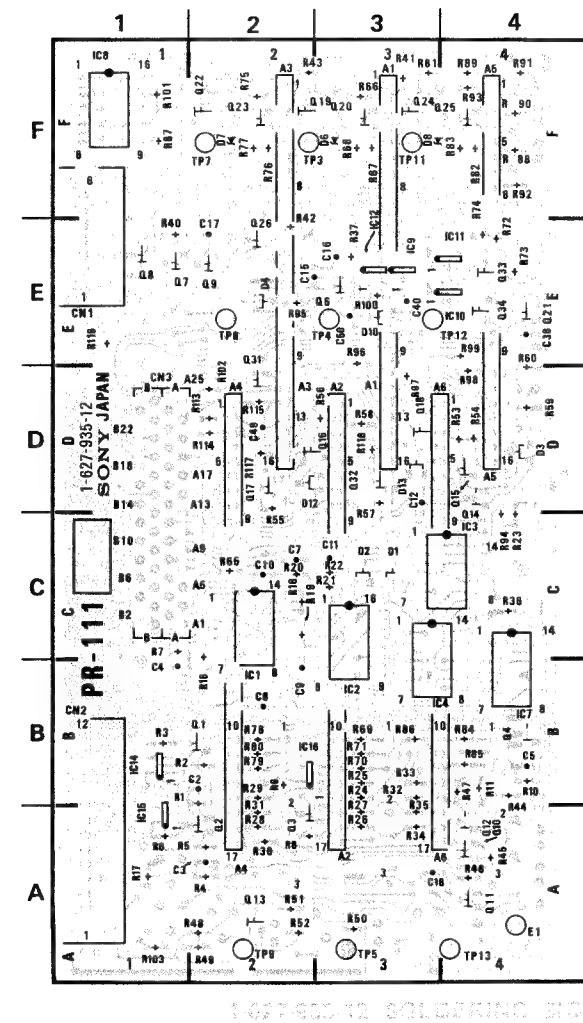
Ser. No. 11271- (UC)
30811- (J)
42081- (EK)

PR-111 (1-627-935-11,12)

CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-2
		Q19	F-3
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
Q1	B-2	TP11	F-3
Q2	A-2	TP12	E-3
Q3	A-2	TP13	A-4
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		



C-20 (b)



PR-111 (1-627-935-11,12)

CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
Q1	B-2	TP11	F-3
Q2	A-2	TP12	E-3
Q3	A-2	TP13	A-4
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		

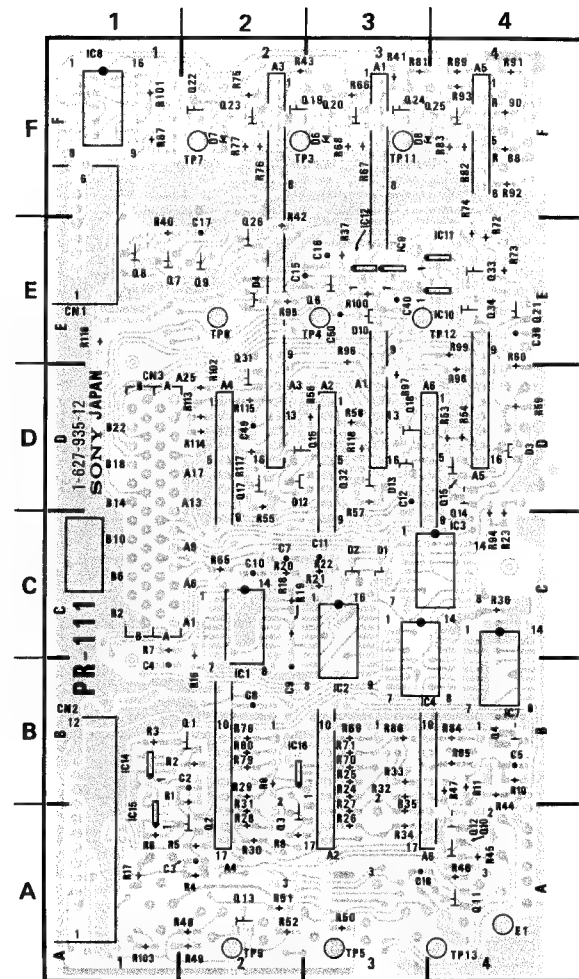
C-21 (b)

VA-70 BOARD

Ser. NO. 11271-12090 (UC)
 30811-30980 (J)
 42081-42850 (EK)

PR-111 (1-627-935-11,12)

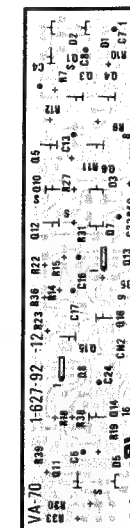
CN1	E-1	Q16	D-2
CN2	A-1	Q17	D-2
CN3	D-1	Q18	D-3
		Q19	F-2
D1	C-3	Q20	F-3
D2	C-3	Q21	E-4
D3	D-4	Q22	F-2
D6	F-3	Q23	F-2
D7	F-2	Q24	F-3
D8	F-3	Q25	F-4
D9	F-1	Q26	E-2
D10	E-3	Q31	D-2
D12	D-2	Q32	D-3
D13	D-3	Q33	E-4
DL1	A-3	Q34	E-4
DL2	A-2		
DL3	A-4	RV1	A-1
		RV2	A-1
		RV3	F-3
E1	A-4	RV4	F-2
		RV5	F-3
IC1	C-2	RV6	F-4
IC2	C-3	RV7	F-4
IC3	C-4	RV8	F-4
IC4	B-3	RV9	A-2
IC5	E-2	RV10	A-3
IC6	E-2	RV11	A-3
IC7	B-4	RV12	F-4
IC8	F-1	RV13	E-4
IC9	E-3	RV14	A-4
IC10	E-4	RV15	A-4
IC11	E-4	RV16	A-4
IC12	E-3		
IC13	F-1	TP3	F-2
IC14	B-1	TP4	E-3
IC15	A-1	TP5	A-3
IC16	B-2	TP7	F-2
IC17	B-4	TP8	E-2
		TP9	A-2
		TP11	F-3
		TP12	E-3
		TP13	A-4
Q1	B-2		
Q2	A-2		
Q3	A-2		
Q4	B-4		
Q5	C-4		
Q6	E-3		
Q7	E-1		
Q8	E-1		
Q9	E-2		
Q10	A-4		
Q11	A-4		
Q12	A-4		
Q13	A-2		
Q14	D-4		
Q15	D-4		



1-627-935-12 SOLDERING SIDE



1-627-925-12 COMPONENT SIDE



1-627-925-12 SOLDERING SIDE

PR-109 BOARD

Ser. No. 11271- (UC)
 30811- (J)
 42081- (EK)



1-627-926-12 COMPONENT SIDE



1-627-926-12 SOLDERING SIDE

PR-109, PR-111, VA-70



PR-109, PR-111, VA-70

VA-70 BOARD

Ser. NO. 12091-	(UC)
30981-	(J)
42851-	(EK)



1-627-925-13 COMPONENT SIDE



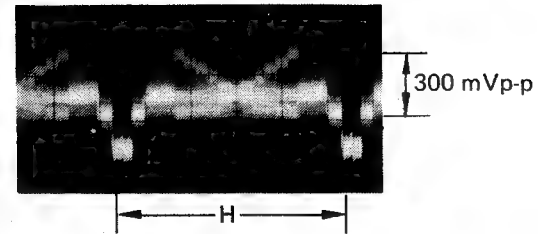
1-627-925-13 SOLDERING SIDE

PR-111

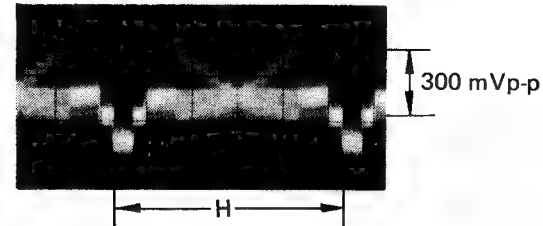
NOTE:

1. All voltage are dc, measured with a digital voltmeter. (input impedance: $10M\Omega$)
2. All waveforms are taken and DC voltage is measured in condition below.
 - . Set camera FILTER selector to 1 position.
 - . Set camera GAIN selector to 0dB position.
 - . Shoot the grayscale pattern on the pattern box. Adjust lens iris so that a white level is 100IRE (For NTSC) or 700mV (For PAL) using the waveform monitor.

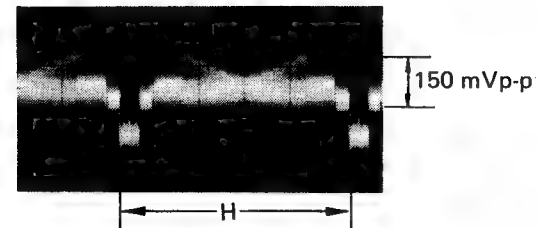
TP3



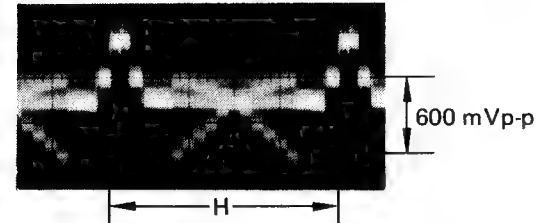
TP7



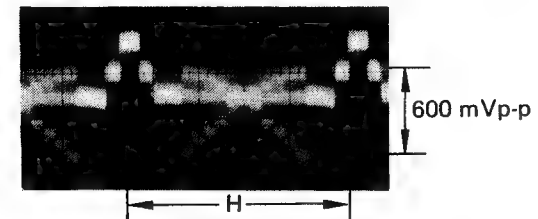
TP11



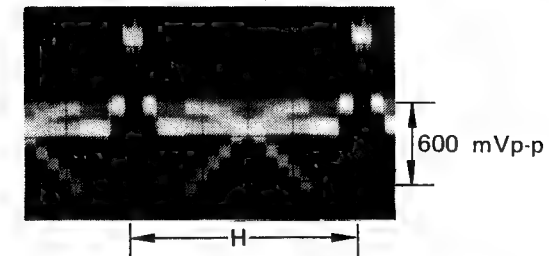
TP4



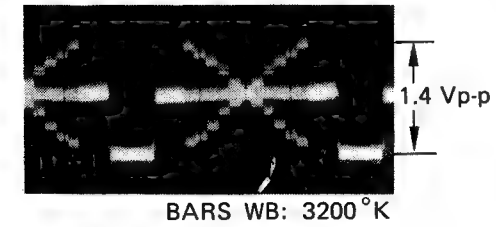
TP8



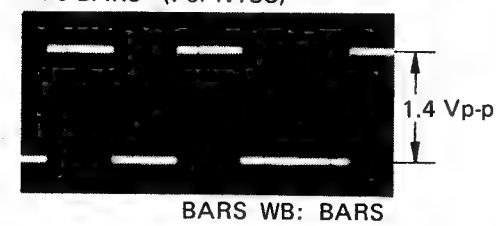
TP12



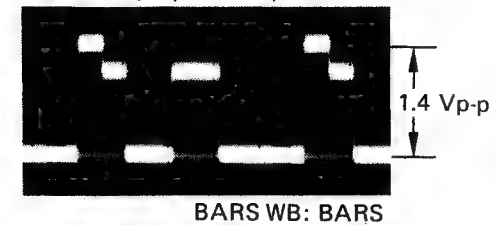
TP5



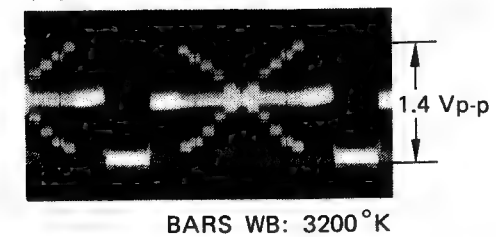
TP5 BARS (For NTSC)



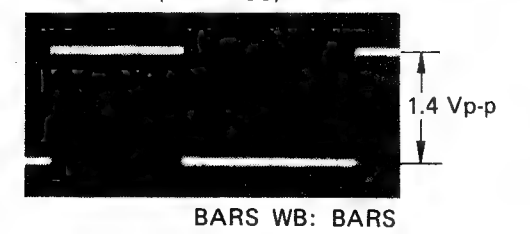
TP5 BARS (For PAL)



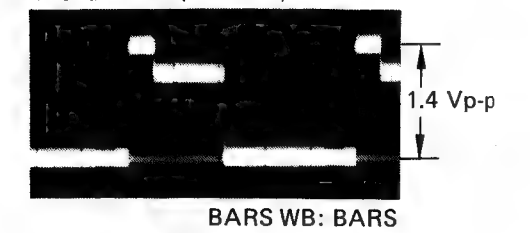
TP9



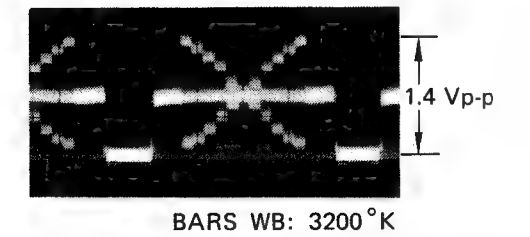
TP9 BARS (For NTSC)



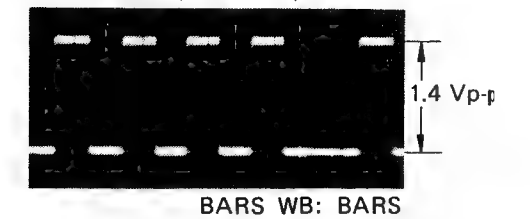
TP9 BARS (For PAL)



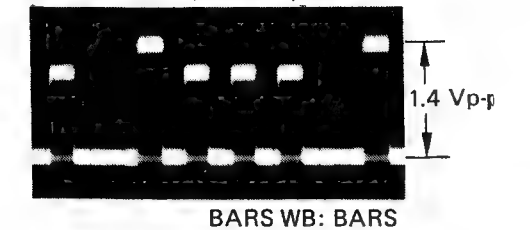
TP13

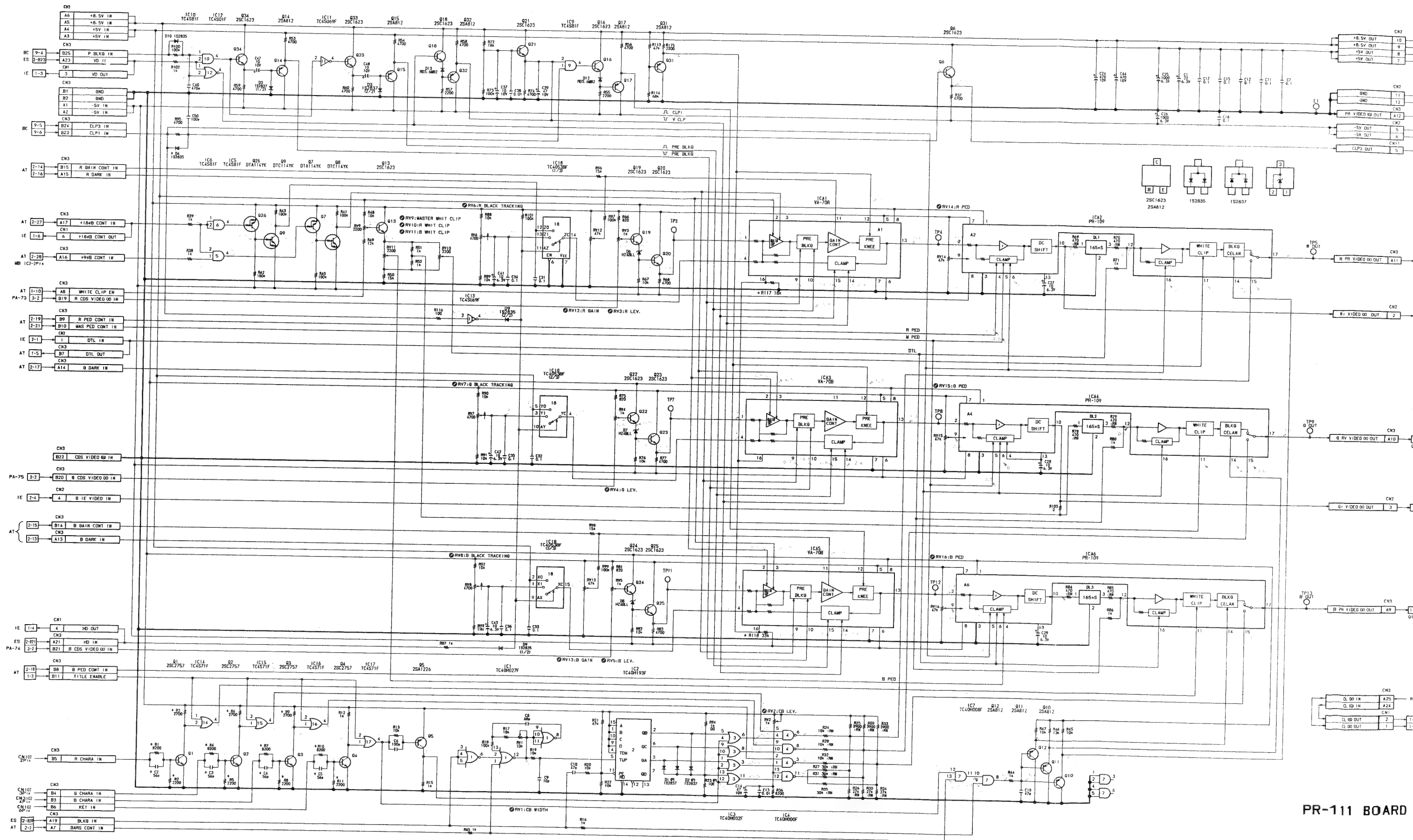


TP13 BARS (For NTSC)

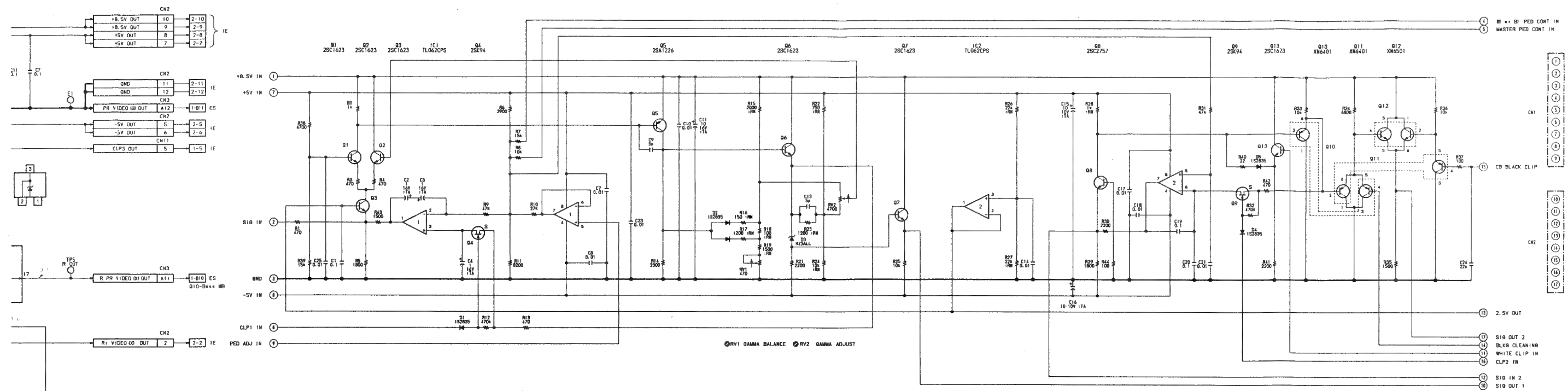


TP13 BARS (For PAL)

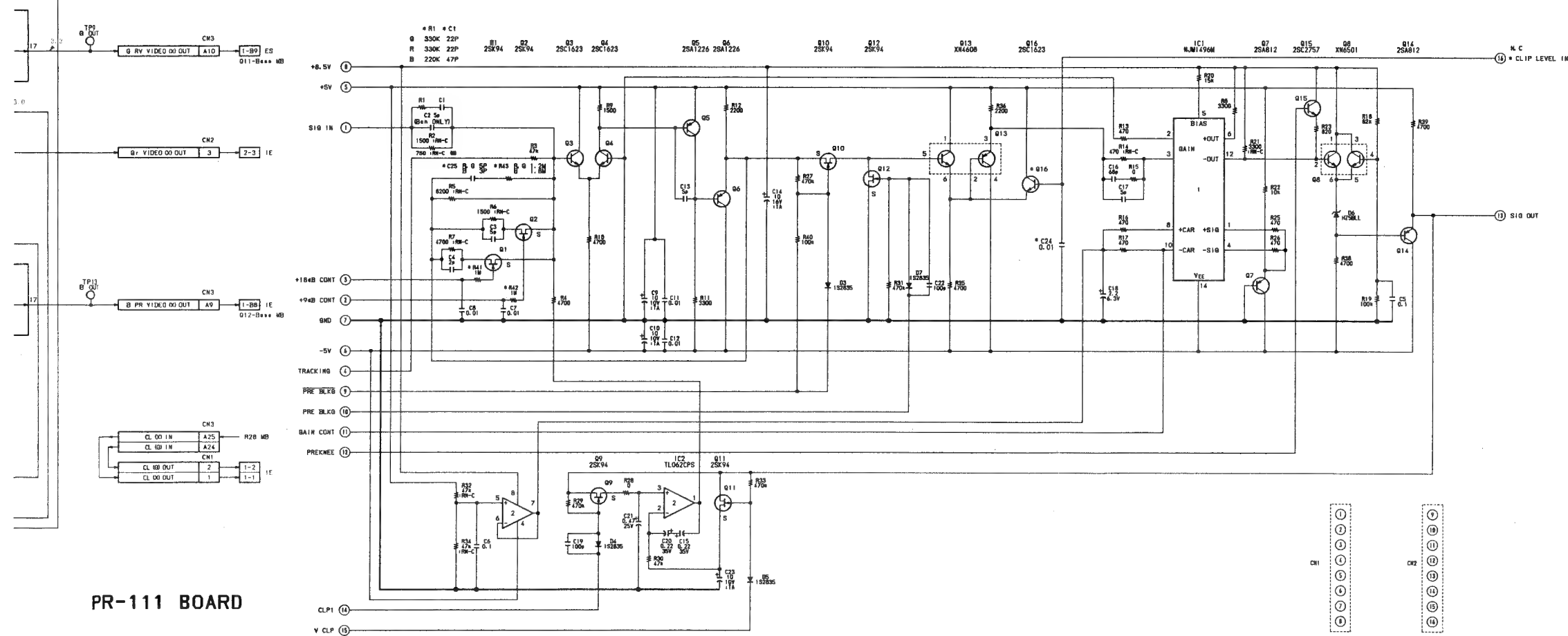




PR-111 BOARD



PR-109



PR-111 BOARD

VA-70 BOARD

C-25

C-26

* NOTE

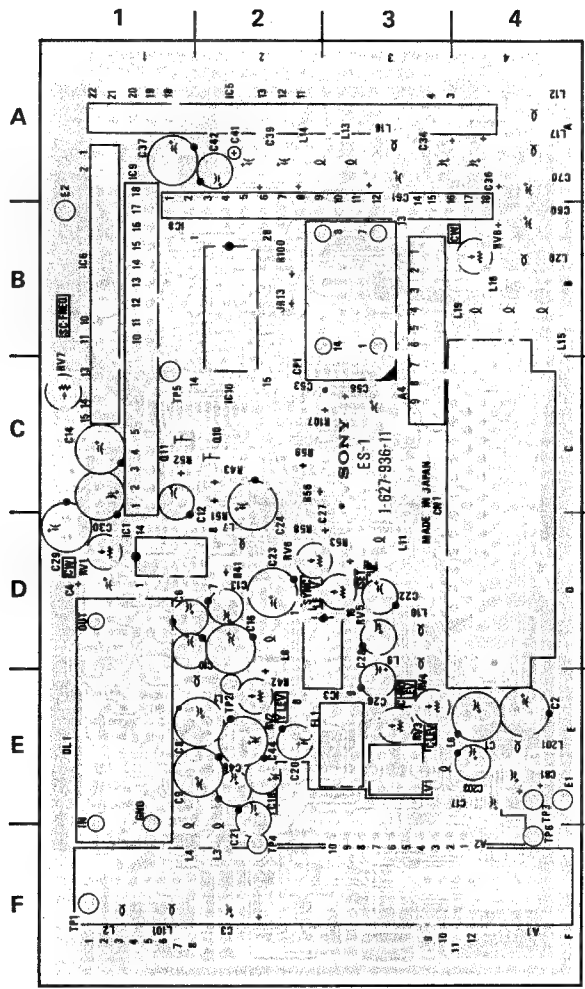
BOARD	REF No	CHANGE INFORMATION	SER No
PR-111	C2, 3, 4, 5	100P → 56P	10921 and higher (U)
	R1, 4, 7, 10	10K → 8200	30611 and higher (U)
	R2, 5, 8, 11	47K → 2200	41521 and higher (U)
	R3, 6, 9	3300 → 2700	
	R117	18K	11271 and higher (U)
VA-70	R118	33K	30811 and higher (U)
	D4	1S1555 → 1S2835	42081 and higher (U)
	C1	R. 0.05 5P → 22P Bch 22P → 47P	
	R1	Rch 470K → 330K Bch 680K → 330K	10921 and higher (U)
	R41, R42	D1, D2 → R41, 42 1S2835 → 1M	30611 and higher (U)
	C25, R43	ADD	42081 and higher (U)
	C24, Q16	ADD	11271 and higher (U)

ES-1 BOARD

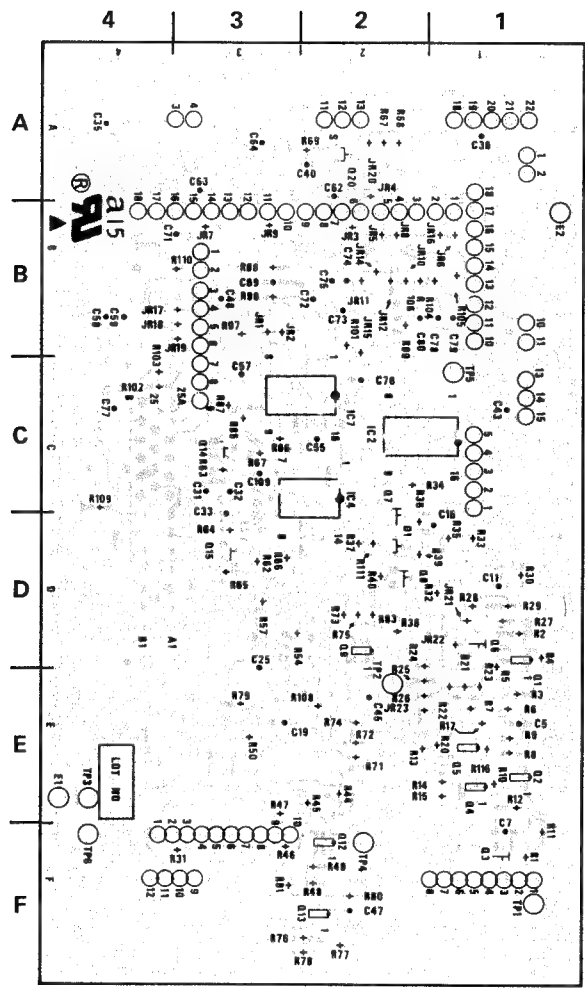
Ser.No.10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)

ES-1 (1-627-936-11)

- CN1 D-4
- CP1 B-3
- D1 D-2
- DL1 E-1
- E1 E-4
- E2 B-1
- FL1 E-4
- IC1 D-1
- IC2 C-2
- IC3 D-3
- IC4 C-2
- IC5 A-2
- IC6 B-1
- IC7 C-2
- IC8 B-2
- IC9 B-1
- IC10 B-2
- LV1 E-3
- Q1 D-1
- Q2 E-1
- Q3 F-1
- Q4 E-1
- Q5 E-1
- Q6 D-1
- Q7 D-2
- Q8 D-2
- Q9 D-2
- Q10 C-2
- Q11 C-1
- Q12 F-2
- Q13 F-2
- Q14 C-3
- Q15 D-3
- Q20 A-2
- RV1 D-1
- RV2 E-2
- RV3 E-3
- RV4 E-3
- RV5 D-3
- RV6 D-2
- RV7 C-1
- RV8 B-4
- TP1 F-1
- TP2 E-2
- TP3 E-4
- TP5 C-1
- TP6 F-4



C-28 (a)

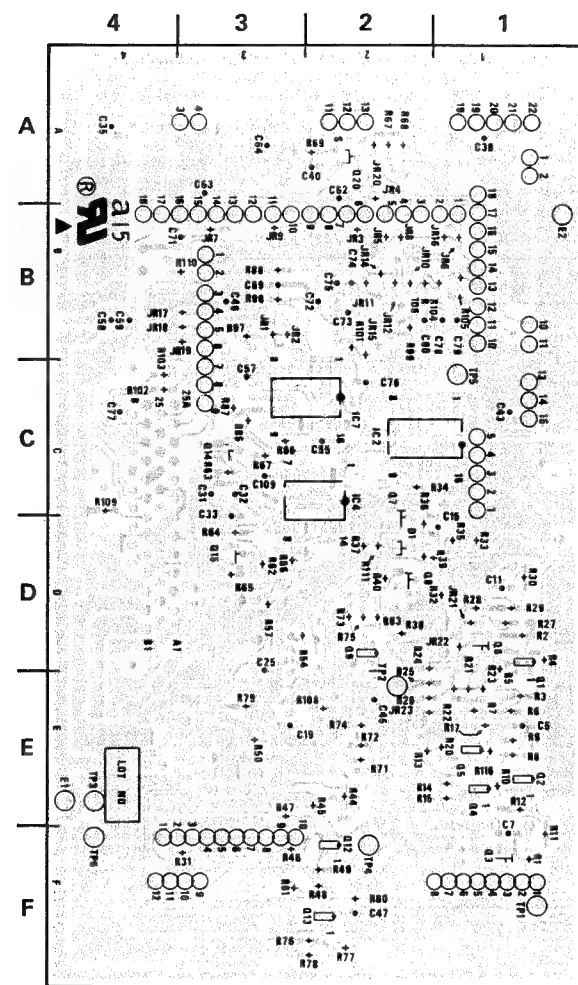


C-29 (a)

ES-1 (1-627-936-11)

- CN1 D-4
- CP1 B-3
- D1 D-2
- DL1 E-1
- E1 E-4
- E2 B-1
- FL1 E-4
- IC1 D-1
- IC2 C-2
- IC3 D-3
- IC4 C-2
- IC5 A-2
- IC6 B-1
- IC7 C-2
- IC8 B-2
- IC9 B-1
- IC10 B-2
- LV1 E-3
- Q1 D-1
- Q2 E-1
- Q3 F-1
- Q4 E-1
- Q5 E-1
- Q6 D-1
- Q7 D-2
- Q8 D-2
- Q9 D-2
- Q10 C-2
- Q11 C-1
- Q12 F-2
- Q13 F-2
- Q14 C-3
- Q15 D-3
- Q20 A-2
- RV1 D-1
- RV2 E-2
- RV3 E-3
- RV4 E-3
- RV5 D-3
- RV6 D-2
- RV7 C-1
- RV8 B-4
- TP1 F-1
- TP2 E-2
- TP3 E-4
- TP5 C-1
- TP6 F-4

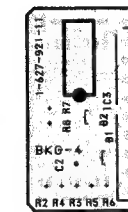
BKG-4 BOARD (NTSC ONLY)



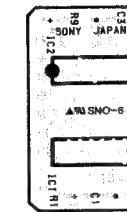
1-627-936-11 SOLDERING SIDE

ES-1 (1-627-936-11)

CN1	D-4
CP1	B-3
D1	D-2
DL1	E-1
E1	E-4
E2	B-1
FL1	E-4
IC1	D-1
IC2	C-2
IC3	D-3
IC4	C-2
IC5	A-2
IC6	B-1
IC7	C-2
IC8	B-2
IC9	B-1
IC10	B-2
LV1	E-3
Q1	D-1
Q2	E-1
Q3	F-1
Q4	E-1
Q5	E-1
Q6	D-1
Q7	D-2
Q8	D-2
Q9	D-2
Q10	C-2
Q11	C-1
Q12	F-2
Q13	F-2
Q14	C-3
Q15	D-3
Q20	A-2
RV1	D-1
RV2	E-2
RV3	E-3
RV4	E-3
RV5	D-3
RV6	D-2
RV7	C-1
RV8	B-4
TP1	F-1
TP2	E-2
TP3	E-4
TP5	C-1
TP6	F-4



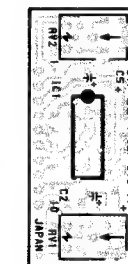
1-627-921-11 COMPONENT SIDE



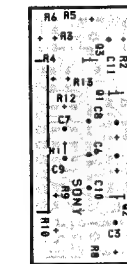
1-627-921-11 SOLDERING SIDE

CM-22 BOARD

Ser.No. 10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)



1-627-918-11 COMPONENT SIDE



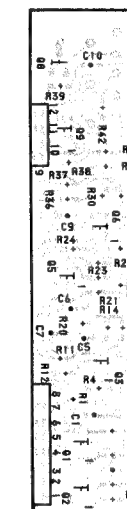
1-627-918-11 SOLDERING SIDE

MX-18 BOARD

Ser.No. 10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)



1-627-919-11 COMPONENT SIDE



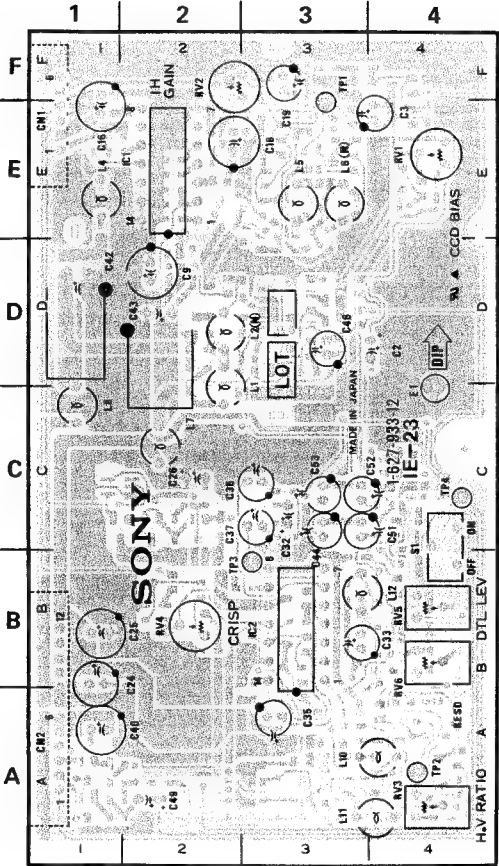
1-627-919-11 SOLDERING SIDE

ES-1 BOARD
Ser.No. 11271- (UC)
30811- (J)
42081- (EK)

BK

ES-1 (1-627-936-12)

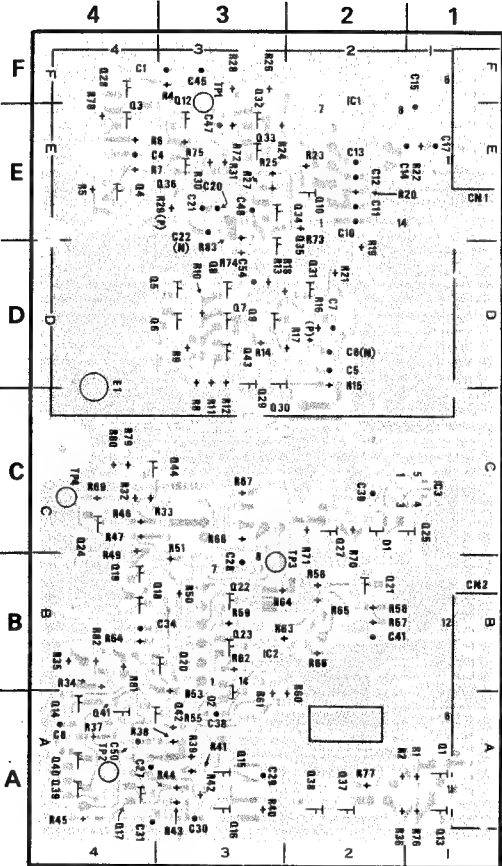
- CN1 E-1
- CP1 B-3
- D1 D-2
- DL1 E-1
- E1 E-4
- E2 B-1
- FL1 E-4
- IC1 D-1
- IC2 C-2
- IC3 D-3
- IC4 C-2
- IC5 A-2
- IC6 B-1
- IC7 C-2
- IC8 B-2
- IC9 B-1
- IC10 B-2
- LV1 E-3
- Q1 D-1
- Q2 E-1
- Q3 F-1
- Q4 E-1
- Q5 E-1
- Q6 D-1
- Q7 D-2
- Q8 D-2
- Q9 D-2
- Q10 C-2
- Q11 C-1
- Q12 F-2
- Q13 F-2
- Q14 C-3
- Q15 D-3
- Q20 A-2
- RV1 D-1
- RV2 E-2
- RV3 E-3
- RV4 F-3
- RV5 D-3
- RV6 D-2
- RV7 C-1
- RV8 B-4
- TP1 F-3
- TP2 A-4
- TP3 B-3
- TP4 C-4
- TP5 C-1
- TP6 F-4



C-28 (b)

ES-1 (1-627-936-12)

- CN1 E-1
- CP1 B-3
- D1 D-2
- DL1 E-1
- E1 E-4
- E2 B-1
- FL1 E-4
- IC1 D-1
- IC2 C-2
- IC3 D-3
- IC4 C-2
- IC5 A-2
- IC6 B-1
- IC7 C-2
- IC8 B-2
- IC9 B-1
- IC10 B-2
- LV1 E-3
- Q1 D-1
- Q2 E-1
- Q3 F-1
- Q4 E-1
- Q5 E-1
- Q6 D-1
- Q7 D-2
- Q8 D-2
- Q9 D-2
- Q10 C-2
- Q11 C-1
- Q12 F-2
- Q13 F-2
- Q14 C-3
- Q15 D-3
- Q20 A-2
- RV1 D-1
- RV2 E-2
- RV3 E-3
- RV4 F-3
- RV5 D-3
- RV6 D-2
- RV7 C-1
- RV8 B-4
- TP1 F-3
- TP2 A-4
- TP3 B-3
- TP4 C-4
- TP5 C-1
- TP6 F-4

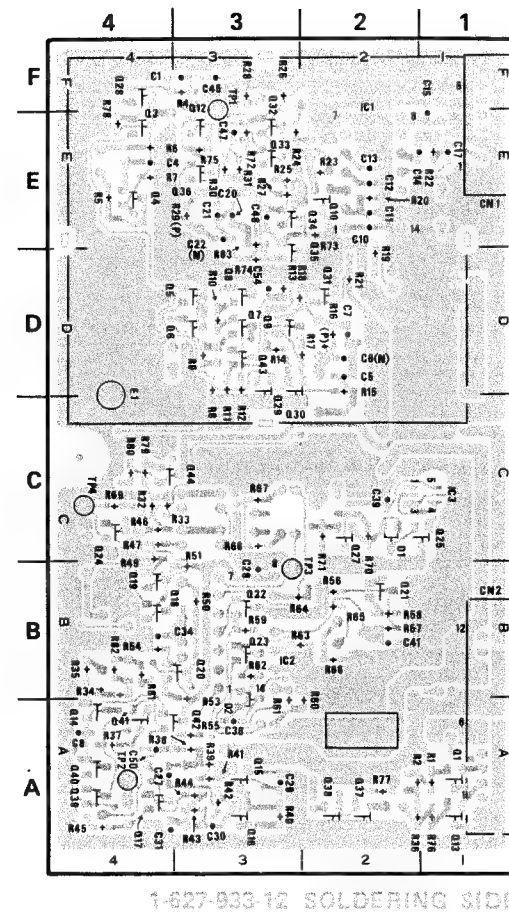


C-29 (b)

CM

MX

BKG-4 BOARD (NTSC ONLY)

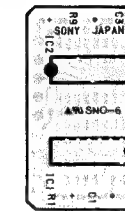


ES-1 (1-627-936-12)

CN1	E-1
CP1	B-3
D1	D-2
DL1	E-1
E1	E-4
E2	B-1
FL1	E-4
IC1	D-1
IC2	C-2
IC3	D-3
IC4	C-2
IC5	A-2
IC6	B-1
IC7	C-2
IC8	B-2
IC9	B-1
IC10	B-2
LV1	E-3
Q1	D-1
Q2	E-1
Q3	F-1
Q4	E-1
Q5	E-1
Q6	D-1
Q7	D-2
Q8	D-2
Q9	D-2
Q10	C-2
Q11	C-1
Q12	F-2
Q13	F-2
Q14	C-3
Q15	D-3
Q20	A-2
RV1	D-1
RV2	E-2
RV3	E-3
RV4	F-3
RV5	D-3
RV6	D-2
RV7	C-1
RV8	B-4
TP1	F-3
TP2	A-4
TP3	B-3
TP4	C-4
TP5	C-1
TP6	F-4



1-627-921-11 COMPONENT SIDE



1-627-921-11 SOLDERING SIDE

CM-22 BOARD

Ser. No. 11271- (UC)
30811- (J)
42081- (EK)



1-627-918-12 COMPONENT SIDE



1-627-918-12 SOLDERING SIDE

MX-18 BOARD

Ser. No. 11271- (UC)
30811- (J)
42081- (EK)



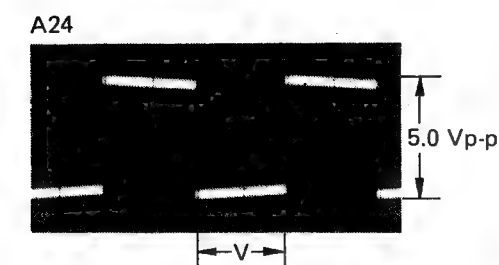
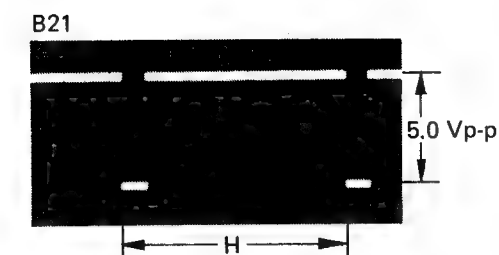
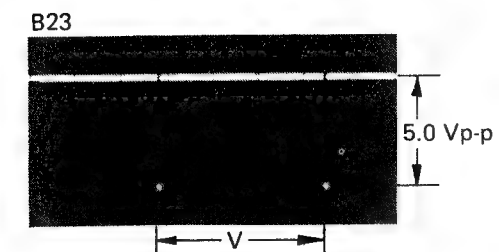
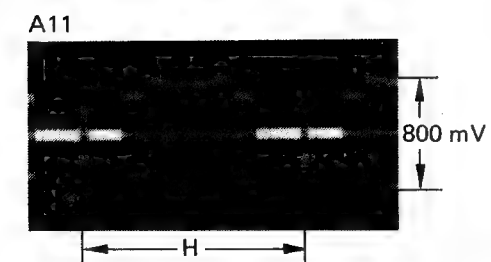
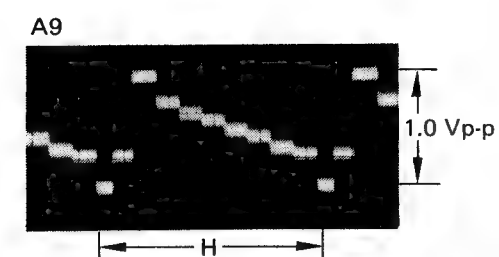
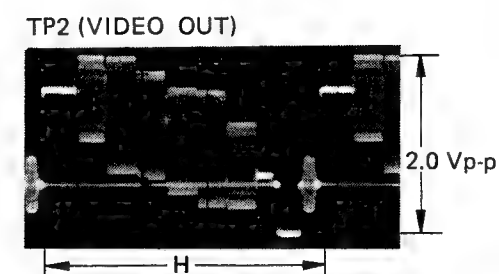
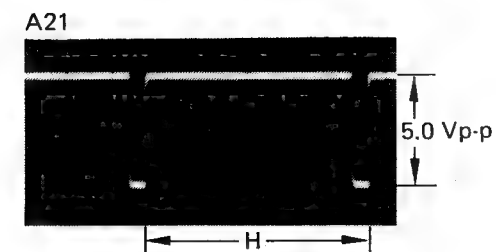
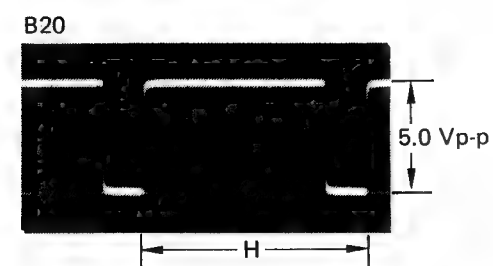
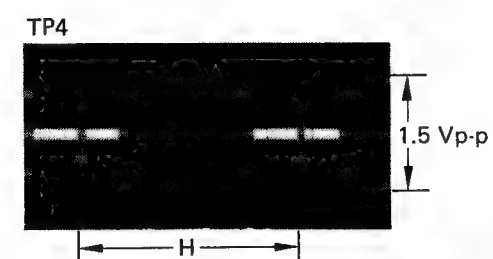
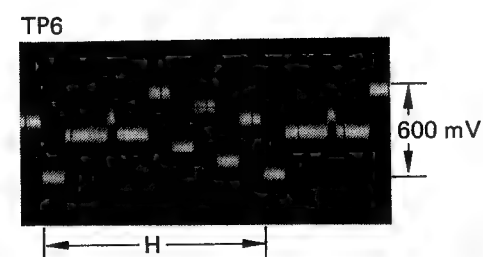
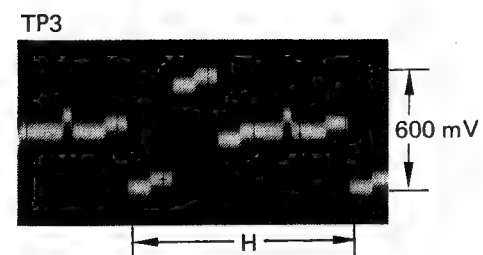
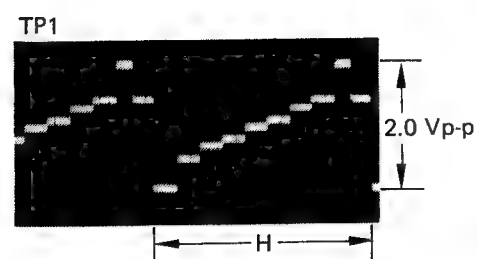
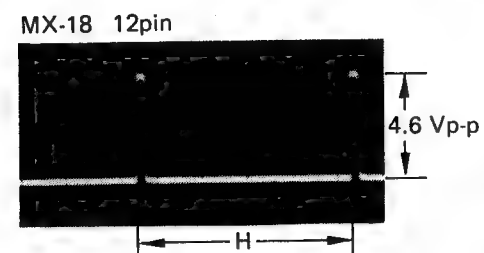
1-627-919-12 COMPONENT SIDE

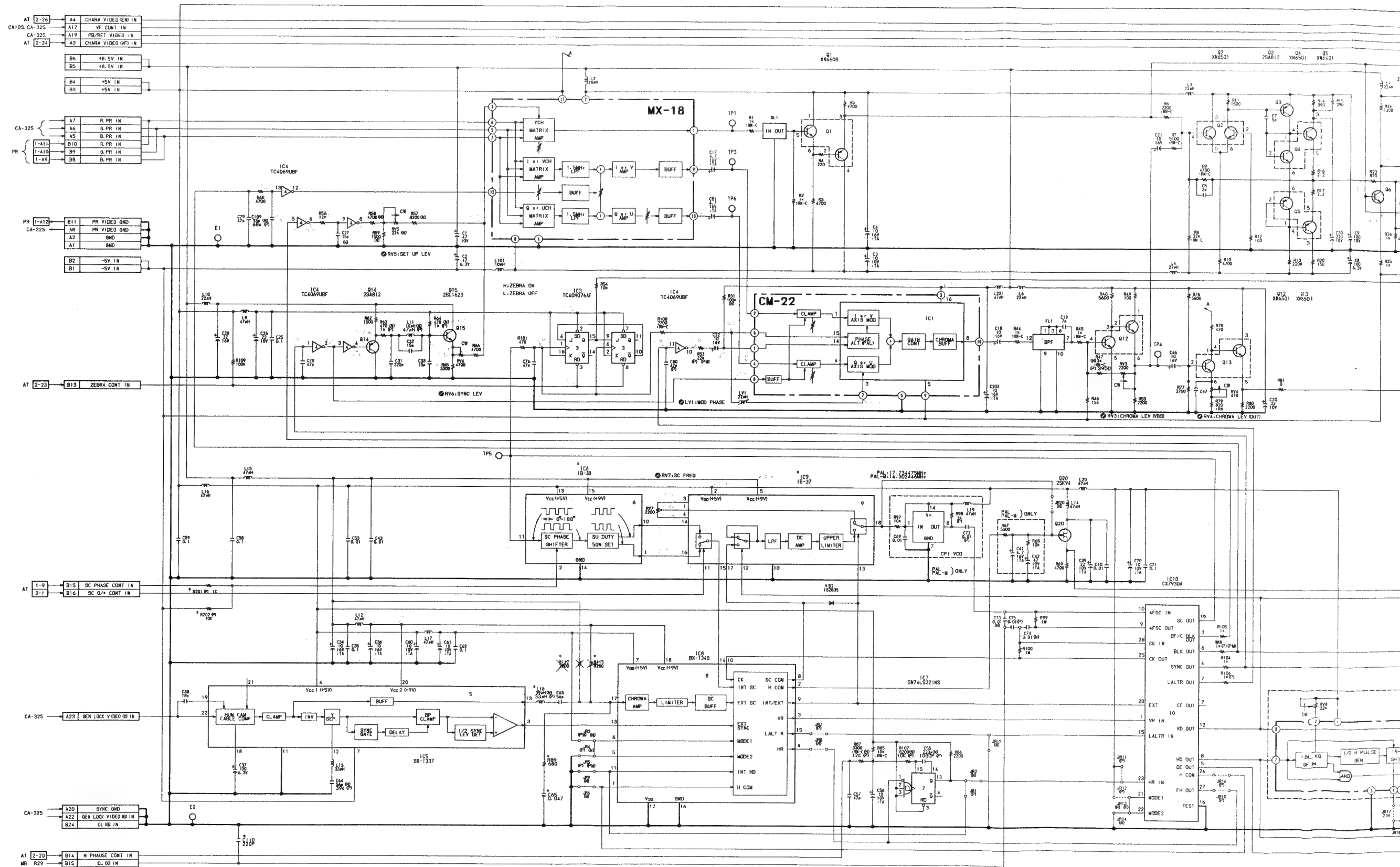


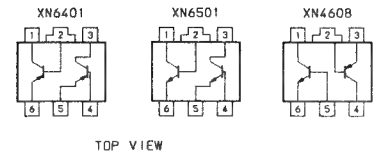
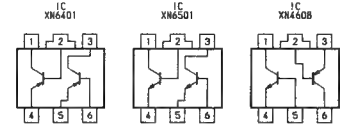
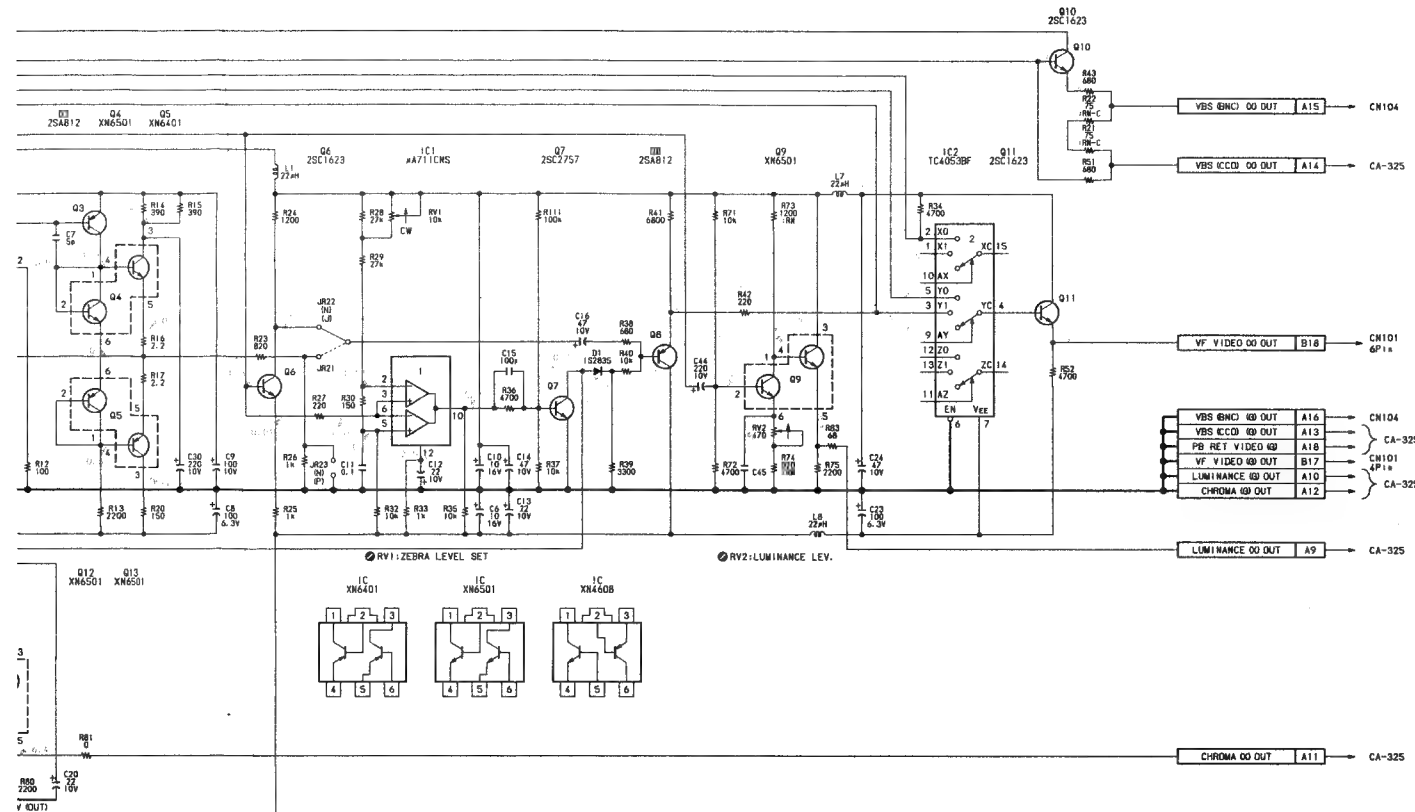
1-627-919-12 SOLDERING SIDE

NOTE :

1. All voltage are dc, measured with a digital voltmeter. (input impedance: 10M Ω)
2. All waveforms are taken and DC voltage is measured in condition below.
 - . Set camera BARS/WB selector to BARS position.
 - . Supply a color-bar signal to the GEN LOCK IN terminal.
3. DC voltage is measured in condition below.
 - . Work the camera in the INT mode.

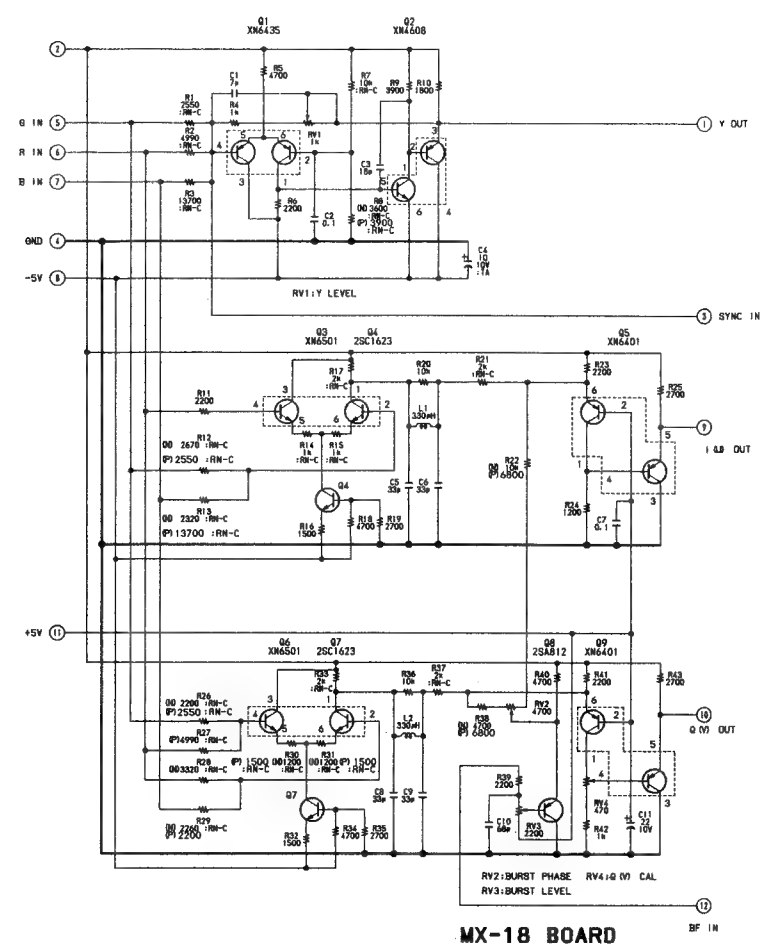




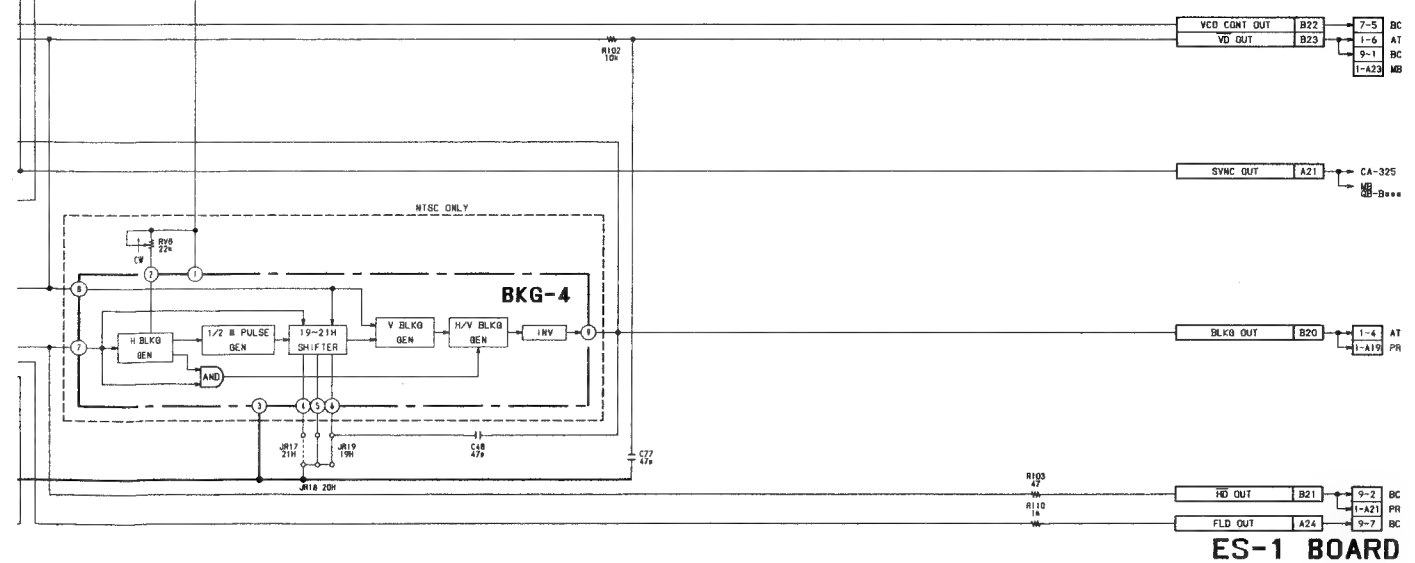


* NOTE

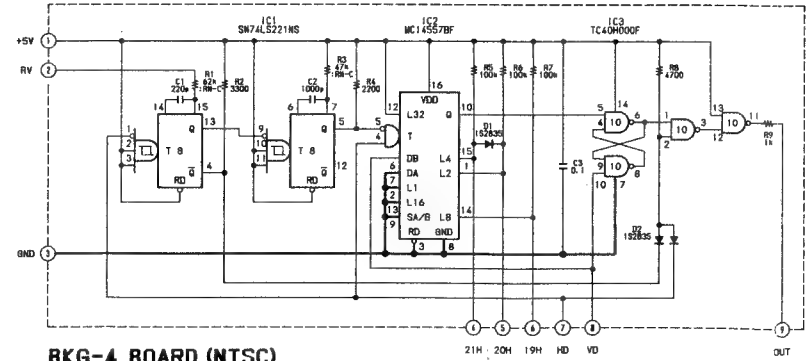
REF No	CHANGE INFORMATION	SER No
IC6	1S2835 → 1S2835	10921 - (JC)
D2	0.047 → ADD	30611 - (LJ)
C65	680 → ADD	41521 - (EK)
R89	2.2K → DELETE	11271 and higher
R112	8.2K → DELETE	30811 and higher
R113	56MH → 39MH	42081 and higher
L18	(NTSC)	
C110	22P → ADD	11721 - (JC)
		30841 - (LJ)



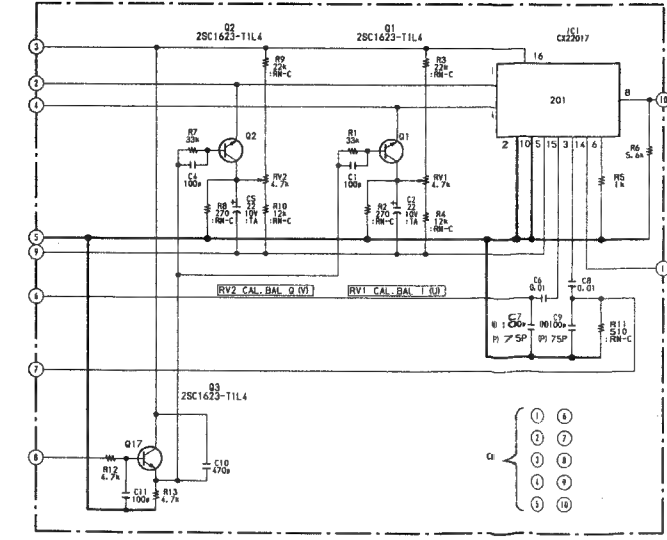
MX-18 BOARD



ES-1 BOARD



BKG-4 BOARD (NTSC)



CM-22 BOARD

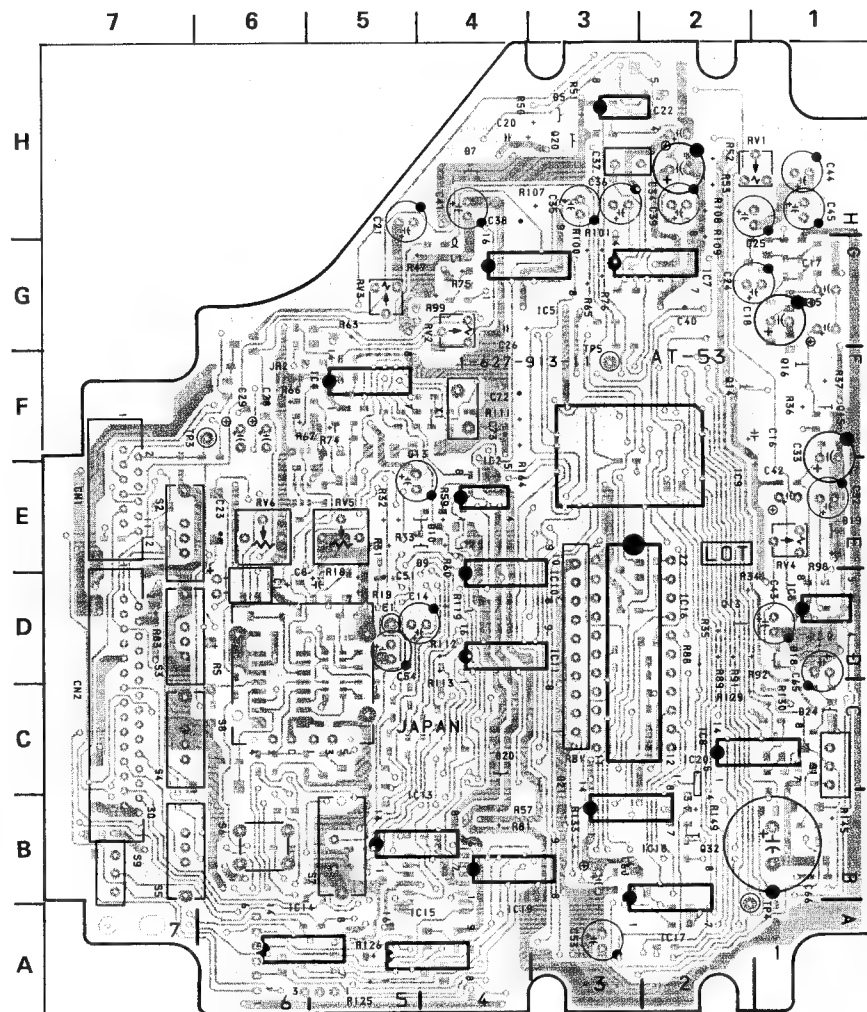
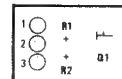
AT-53 BOARD

Ser.No. 10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)

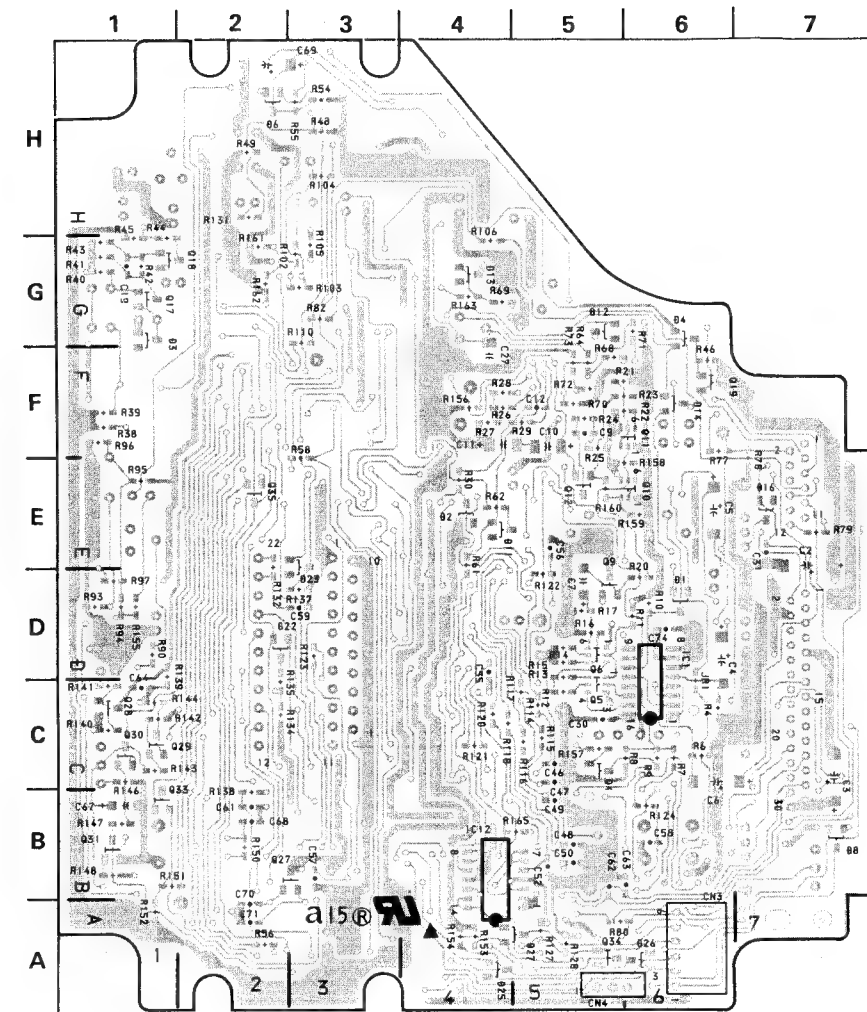
AT-53 (1-627-913-11)

CN1	E-7	Q4	C-5
CN2	C-7	Q5	C-5
CN3	A-6	Q6	D-5
CN4	A-5	Q9	D-5
		Q10	E-6
D1	D-6	Q11	F-6
D2	E-4	Q12	E-5
D3	G-1	Q13	D-2
D4	G-6	Q14	F-2
D5	H-3	Q15	F-1
D6	H-2	Q16	F-1
D7	H-4	Q17	G-1
D8	B-7	Q18	G-1
D9	E-4	Q19	F-6
D10	E-4	Q20	H-3
D11	E-4	Q27	B-2
D12	G-5	Q28	C-1
D13	G-4	Q29	C-1
D14	F-6	Q30	C-1
D16	E-7	Q31	B-1
D18	D-1	Q32	B-2
D19	E-1	Q33	B-1
D20	C-4	Q34	A-5
D21	C-3	Q35	E-2
D22	D-2		
D23	D-3	RB1	D-3
D24	C-1		
D25	A-4	RV1	H-1
D26	A-6	RV2	G-4
D27	A-5	RV3	G-5
		RV4	E-1
E1	D-5	RV5	E-5
		RV6	E-6
IC1	C-6	S1	C-1
IC2	E-4	S2	E-7
IC4	F-5	S3	D-7
IC5	G-3	S4	C-7
IC6	D-1	S5	B-7
IC7	G-2	S6	B-6
IC8	C-2	S7	B-5
IC10	D-4	S8	C-6
IC11	D-4	S9	B-7
IC12	B-4		
IC13	B-5		
IC14	A-6	TP3	F-6
IC15	A-4	TP4	A-2
IC16	D-3	TP5	F-3
IC17	B-2		
IC18	B-3	X1	F-4
IC19	B-4		
IC20	C-2		

DUS-289 BOARD



1-627-913-11 COMPONENT SIDE



1-627-913-11 SOLDERING SIDE

AT-53 (1-627-913-11)

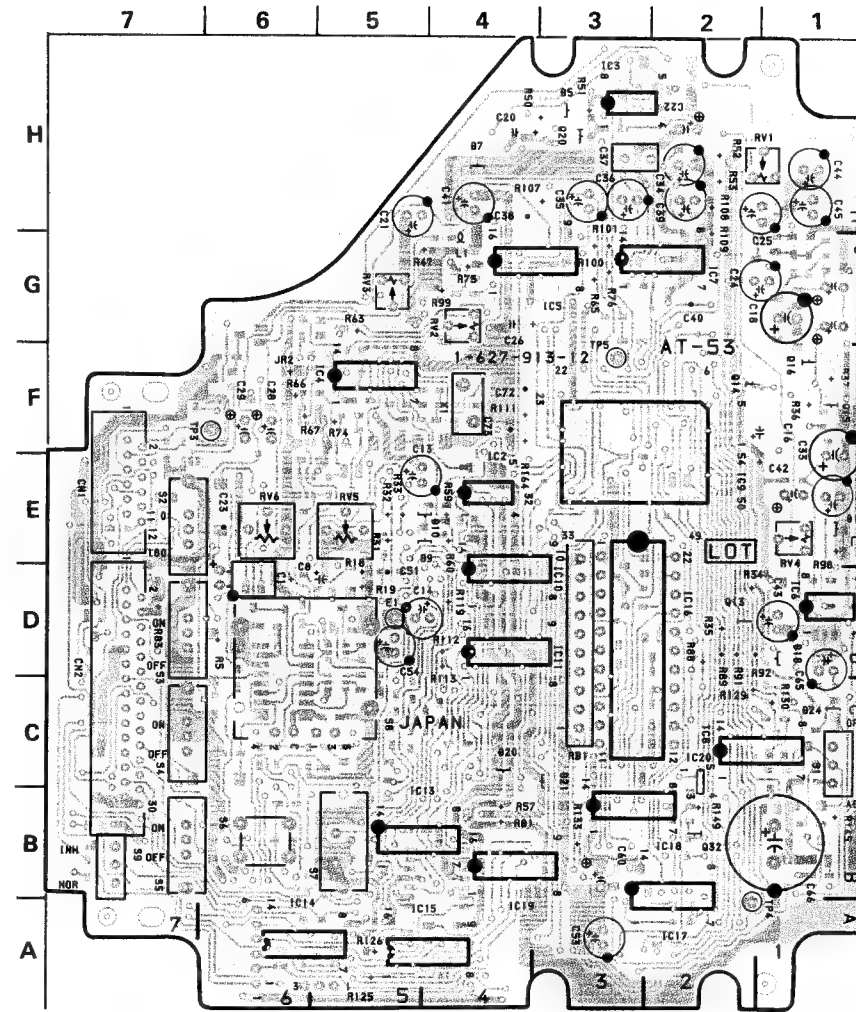
CN1	E-7	Q4	C-5
CN2	C-7	Q5	C-5
CN3	A-6	Q6	D-5
CN4	A-5	Q9	D-5
		Q10	E-6
D1	D-6	Q11	F-6
D2	E-4	Q12	E-5
D3	G-1	Q13	D-2
D4	G-6	Q14	F-2
D5	H-3	Q15	F-1
D6	H-2	Q16	F-1
D7	H-4	Q17	G-1
D8	B-7	Q18	G-1
D9	E-4	Q19	F-6
D10	E-4	Q20	H-3
D11	E-4	Q27	B-2
D12	G-5	Q28	C-1
D13	G-4	Q29	C-1
D14	F-6	Q30	C-1
D16	E-7	Q31	B-1
D18	D-1	Q32	B-2
D19	E-1	Q33	B-1
D20	C-4	Q34	A-5
D21	C-3	Q35	E-2
D22	D-2		
D23	D-3	RB1	D-3
D24	C-1		
D25	A-4	RV1	H-1
D26	A-6	RV2	G-4
D27	A-5	RV3	G-5
		RV4	E-1
E1	D-5	RV5	E-5
		RV6	E-6
IC1	C-6	S1	C-1
IC2	E-4	S2	E-7
IC4	F-5	S3	D-7
IC5	G-3	S4	C-7
IC6	D-1	S5	B-7
IC7	G-2	S6	B-6
IC8	C-2	S7	B-5
IC10	D-4	S8	C-6
IC11	D-4	S9	B-7
IC12	B-4		
IC13	B-5		
IC14	A-6	TP3	F-6
IC15	A-4	TP4	A-2
IC16	D-3	TP5	F-3
IC17	B-2		
IC18	B-3	X1	F-4
IC19	B-4		
IC20	C-2		

AT-53 BOARD

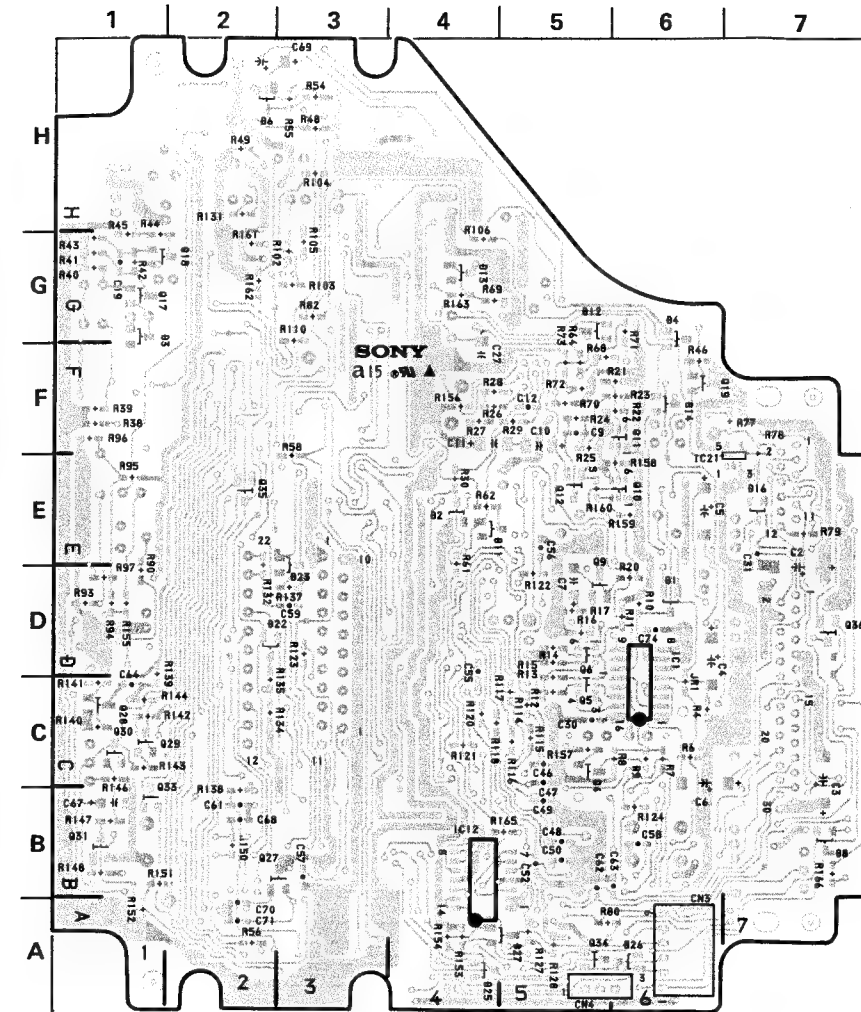
Ser.No. 11271-
30811-
42081-
(UC)
(J)
(EK)

AT-53 (1-627-913-12)

CN1	E-7	Q4	C-5
CN2	C-7	Q5	C-5
CN3	A-6	Q6	D-5
CN4	A-5	Q9	D-5
		Q10	E-6
D1	D-6	Q11	F-6
D2	E-4	Q12	E-5
D3	G-1	Q13	D-2
D4	G-6	Q14	F-2
D5	H-3	Q15	F-1
D6	H-2	Q16	F-1
D7	H-4	Q17	G-1
D8	B-7	Q18	G-1
D9	E-4	Q19	F-6
D10	E-4	Q20	H-3
D11	E-4	Q27	B-2
D12	G-5	Q28	C-1
D13	G-4	Q29	C-1
D14	F-6	Q30	C-1
D16	E-7	Q31	B-1
D18	D-1	Q32	B-2
D19	E-1	Q33	B-1
D20	C-4	Q34	A-5
D21	C-3	Q35	E-2
D22	D-2		
D23	D-3	RB1	D-3
D24	C-1		
D25	A-4	RV1	H-1
D26	A-6	RV2	G-4
D27	A-5	RV3	G-5
		RV4	E-1
E1	D-5	RV5	E-5
		RV6	E-6
IC1	C-6	S1	C-1
IC2	E-4	S2	E-7
IC4	F-5	S3	D-7
IC5	G-3	S4	C-7
IC6	D-1	S5	B-7
IC7	G-2	S6	B-6
IC8	C-2	S7	B-5
IC10	D-4	S8	C-6
IC11	D-4	S9	B-7
IC12	B-4		
IC13	B-5		
IC14	A-6	TP3	F-6
IC15	A-4	TP4	A-2
IC16	D-3	TP5	F-3
IC17	B-2		
IC18	B-3	X1	F-4
IC19	B-4		
IC20	C-2		



1-627-913-12 COMPONENT SIDE

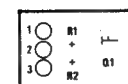


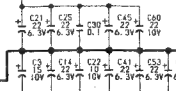
1-627-913-12 SOLDERING SIDE

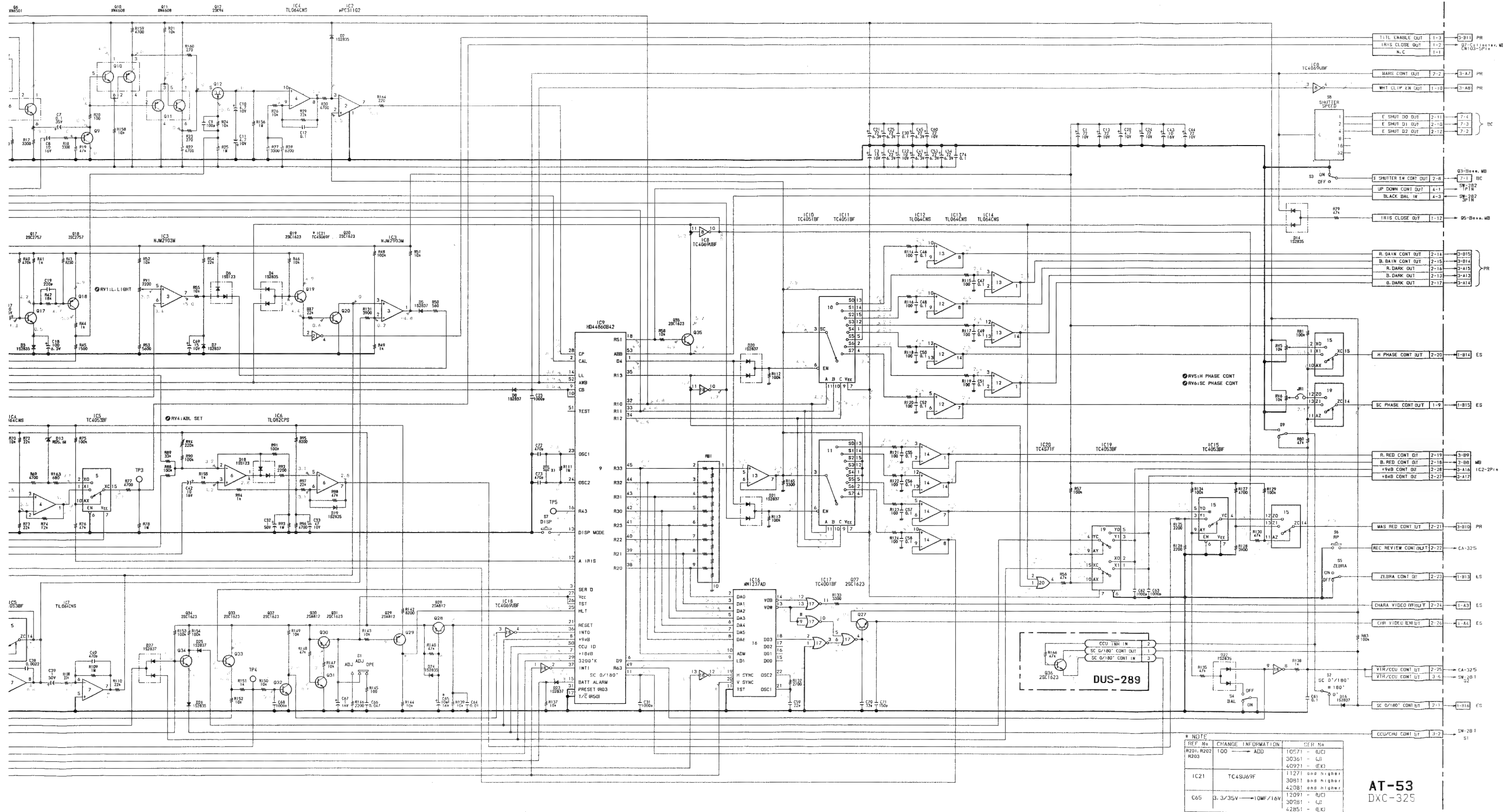
AT-53 (1-627-913-12)

CN1	E-7	Q4	C-5
CN2	C-7	Q5	C-5
CN3	A-6	Q6	D-5
CN4	A-5	Q9	D-5
		Q10	E-6
D1	D-6	Q11	F-6
D2	E-4	Q12	E-5
D4	G-6	Q13	D-2
D5	H-3	Q14	F-2
D6	H-2	Q15	F-1
D7	H-4	Q16	F-1
D8	B-7	Q17	G-1
D9	E-4	Q18	G-1
D10	E-4	Q19	F-6
D11	E-4	Q20	H-3
D12	G-5	Q27	B-2
D13	G-4	Q28	C-1
D14	F-6	Q29	C-1
D16	E-7	Q30	C-1
D18	D-1	Q31	B-1
D19	E-1	Q32	B-2
D20	C-4	Q33	B-1
D21	C-3	Q34	A-5
D22	D-2	Q35	E-2
D23	D-3	Q36	D-7
D24	C-1		
D25	A-4	RB1	D-3
D26	A-6		
D27	A-5	RV1	H-1
		RV2	G-4
E1	D-5	RV3	G-5
		RV4	E-1
IC1	C-6	RV5	E-5
IC2	E-4	RV6	E-6
IC3	H-3		
IC4	F-5	S1	C-1
IC5	G-3	S2	E-7
IC6	D-1	S3	D-7
IC7	G-2	S4	C-7
IC8	C-2	S5	B-7
IC9	E-3	S6	B-6
IC10	D-4	S7	B-5
IC11	D-4	S8	C-6
IC12	B-4	S9	B-7
IC13	B-5		
IC14	A-6	TP3	F-6
IC15	A-4	TP4	A-2
IC16	D-3	TP5	F-3
IC17	B-2		
IC18	B-3	X1	F-4
IC19	B-4		
IC20	C-2		
IC21	F-7		

DUS-289 BOARD





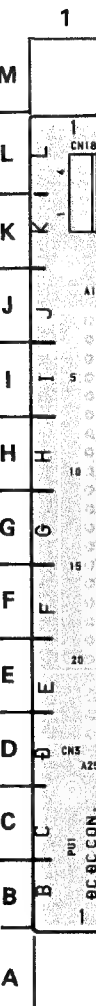


Ser. No. 10001-10250 (UC)
30001-30150 (J)
40001-40350 (EK)



+623-922-11, 12 COMPONENT SIDE

Q1	M-5
Q2	L-5
Q3	I-8
Q4	I-9
Q5	E-9
Q6	F-10
Q7	F-10
Q8	G-10
Q9	G-10
Q10	J-9
Q11	I-9
Q12	I-9



MB-190 BOARD

Ser.No.10001-10250 (UC)
30001-30150 (J)
40001-40350 (EK)

MB-190 (1-627-914-11,12)

- CN1

G-4
- CN2

G-2
- CN3

G-1
- CN4

H-7
- CN5

K-4
- CN6

A-4
- CN7

B-9
- CN8

A-8
- CN9

F-9
- CN10

A-6
- CN11

L-2
- CN13

D-9
- CN14

H-5
- CN15

H-5
- CN16

I-5
- CN17

H-3
- CN18

L-1
- CN19

A-4
- CN21

I-3
- CN22

E-7
- D1

H-10
- D2

H-10
- D3

E-10
- IC1

M-4
- IC2

I-8
- IC3

K-3
- PU1

B-2
- Q1

M-5
- Q2

L-5
- Q3

I-8
- Q4

I-9
- Q5

E-9
- Q6

F-10
- Q7

F-10
- Q8

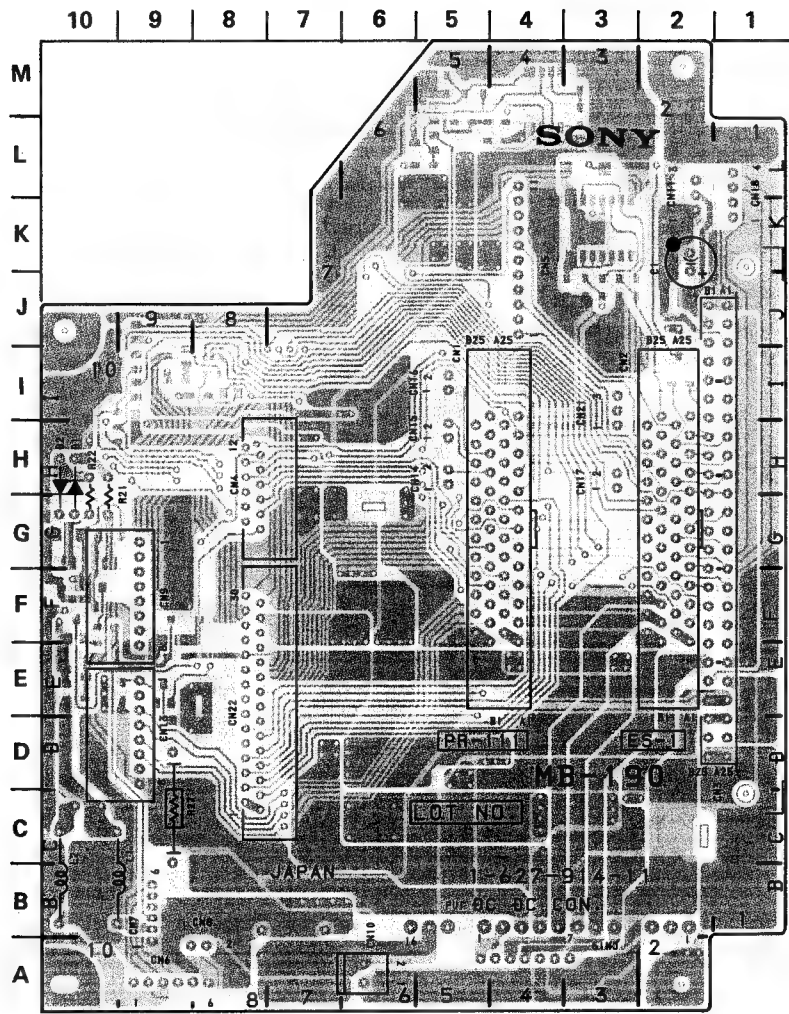
G-10
- Q9

G-10
- Q10

J-9
- Q11

I-9
- Q12

I-9



1-627-914-11 COMPONENT SIDE

C-43 (a)

MB-190 (1-627-914-11,12)

- CN1

G-4
- CN2

G-2
- CN3

G-1
- CN4

H-7
- CN5

K-4
- CN6

A-4
- CN7

B-9
- CN8

A-8
- CN9

F-9
- CN10

A-6
- CN11

L-2
- CN13

D-9
- CN14

H-5
- CN15

H-5
- CN16

I-5
- CN17

H-3
- CN18

L-1
- CN19

A-4
- CN21

I-3
- CN22

E-7
- D1

H-10
- D2

H-10
- D3

E-10
- IC1

M-4
- IC2

I-8
- IC3

K-3
- PU1

B-2
- Q1

M-5
- Q2

L-5
- Q3

I-8
- Q4

I-9
- Q5

E-9
- Q6

F-10
- Q7

F-10
- Q8

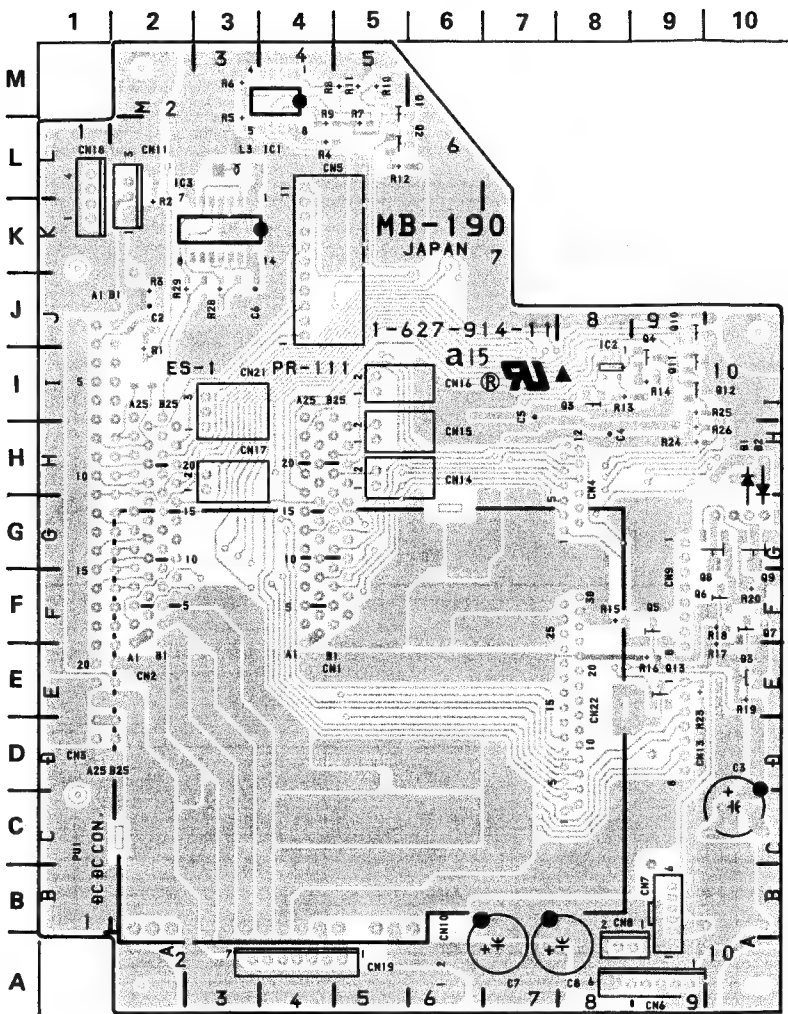
G-10
- Q9

G-10
- Q10

J-9
- Q11

I-9
- Q12

I-9

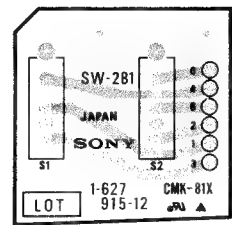


1-627-914-11 SOLDERING SIDE

C-44 (a)

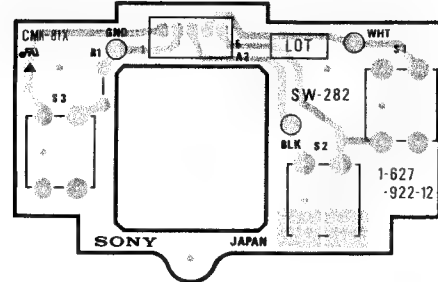
DXC-325(J, UC)
DXC-325 (EK)

SW-281 BOARD



1-627-915 11, 12 COMPONENT SIDE

SW-282 BOARD



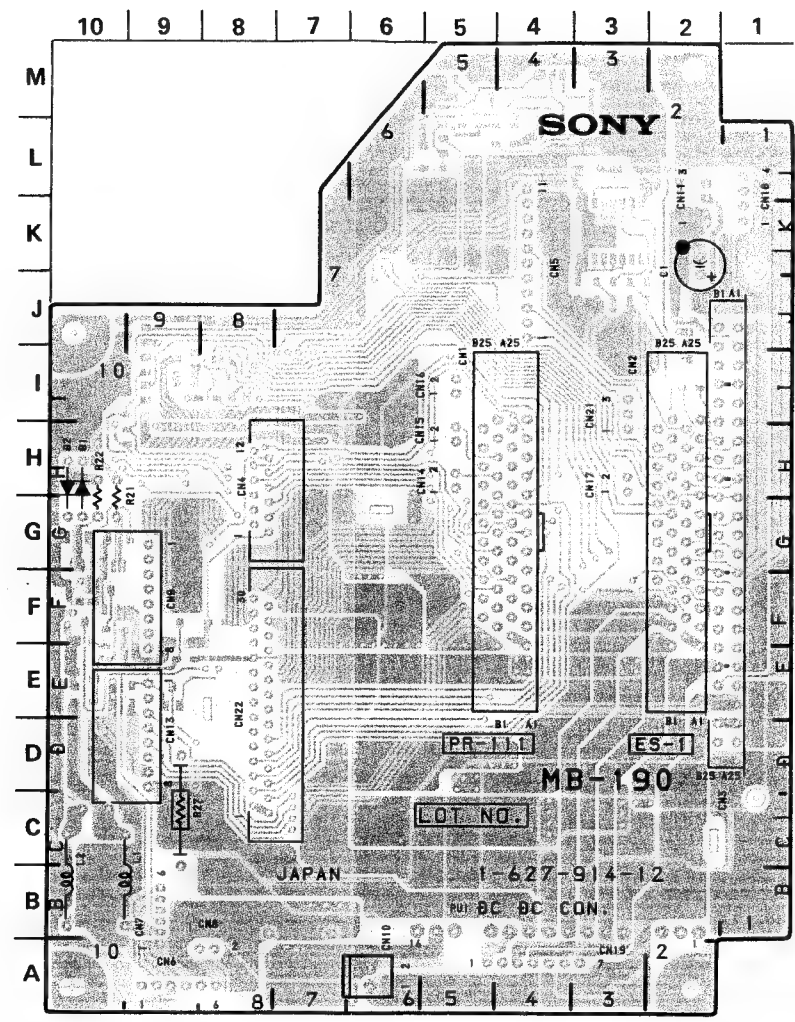
1-627-922 11, 12 COMPONENT SIDE

MB-190 BOARD

Ser. No. 10251-	(UC)
30151-	(J)
40351-	(EK)

MB-190 (1-627-914-11,12)

- | | |
|------|------|
| CN1 | G-4 |
| CN2 | G-2 |
| CN3 | G-1 |
| CN4 | H-7 |
| CN5 | K-4 |
| CN6 | A-4 |
| CN7 | B-9 |
| CN8 | A-8 |
| CN9 | F-9 |
| CN10 | A-6 |
| CN11 | L-2 |
| CN13 | D-9 |
| CN14 | H-5 |
| CN15 | H-5 |
| CN16 | I-5 |
| CN17 | H-3 |
| CN18 | L-1 |
| CN19 | A-4 |
| CN21 | I-3 |
| CN22 | E-7 |
| D1 | H-10 |
| D2 | H-10 |
| D3 | E-10 |
| IC1 | M-4 |
| IC2 | I-8 |
| IC3 | K-3 |
| PU1 | B-2 |
| Q1 | M-5 |
| Q2 | L-5 |
| Q3 | I-8 |
| Q4 | I-9 |
| Q5 | E-9 |
| Q6 | F-10 |
| Q7 | F-10 |
| Q8 | G-10 |
| Q9 | G-10 |
| Q10 | J-9 |
| Q11 | I-9 |
| Q12 | I-9 |



1-627-914-12 COMPONENT SIDE

MB-190 BOARD

Ser.No.10251-	(UC)
30151-	(J)
40351-	(EK)

MB-190 (1-627-914-11,12)

- CN1

G-4
- CN2

G-2
- CN3

G-1
- CN4

H-7
- CN5

K-4
- CN6

A-4
- CN7

B-9
- CN8

A-8
- CN9

F-9
- CN10

A-6
- CN11

L-2
- CN13

D-9
- CN14

H-5
- CN15

H-5
- CN16

I-5
- CN17

H-3
- CN18

L-1
- CN19

A-4
- CN21

I-3
- CN22

E-7
- D1

H-10
- D2

H-10
- D3

E-10
- IC1

M-4
- IC2

I-8
- IC3

K-3
- PU1

B-2
- Q1

M-5
- Q2

L-5
- Q3

I-8
- Q4

I-9
- Q5

E-9
- Q6

F-10
- Q7

F-10
- Q8

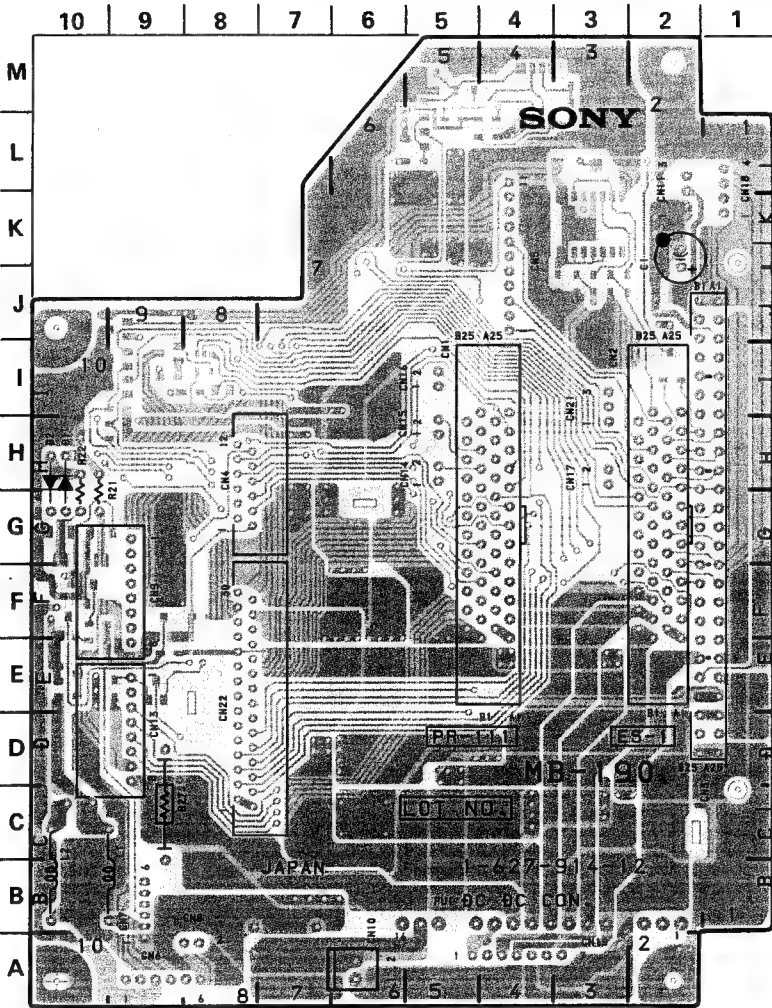
G-10
- Q9

G-10
- Q10

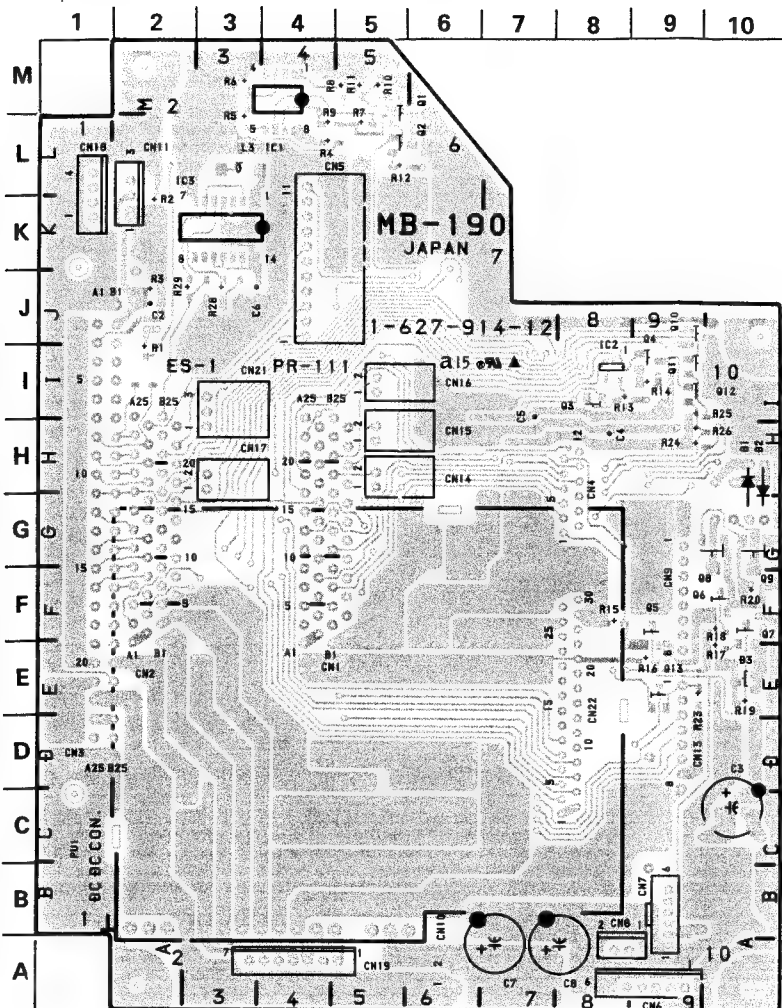
J-9
- Q11

I-9
- Q12

I-9



1-627-914-12 COMPONENT SIDE



1-627-914-12 SOLDERING SIDE

MB-190 (1-627-914-11,12)

- CN1

G-4
- CN2

G-2
- CN3

G-1
- CN4

H-7
- CN5

K-4
- CN6

A-4
- CN7

B-9
- CN8

A-8
- CN9

F-9
- CN10

A-6
- CN11

L-2
- CN13

D-9
- CN14

H-5
- CN15

H-5
- CN16

I-5
- CN17

H-3
- CN18

L-1
- CN19

A-4
- CN21

I-3
- CN22

E-7
- D1

H-10
- D2

H-10
- D3

E-10
- IC1

M-4
- IC2

I-8
- IC3

K-3
- PU1

B-2
- Q1

M-5
- Q2

L-5
- Q3

I-8
- Q4

I-9
- Q5

E-9
- Q6

F-10
- Q7

F-10
- Q8

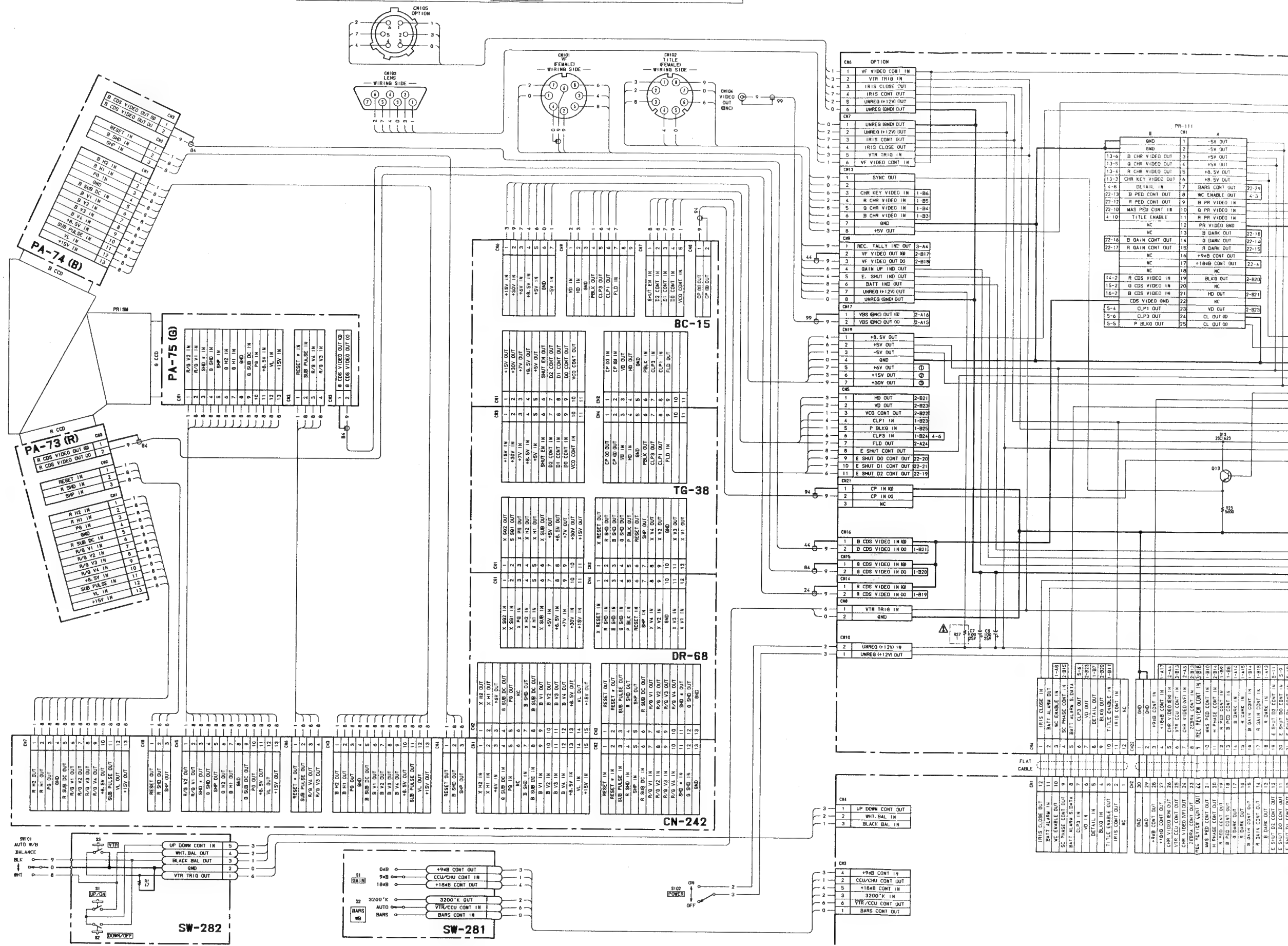
G-10
- Q9

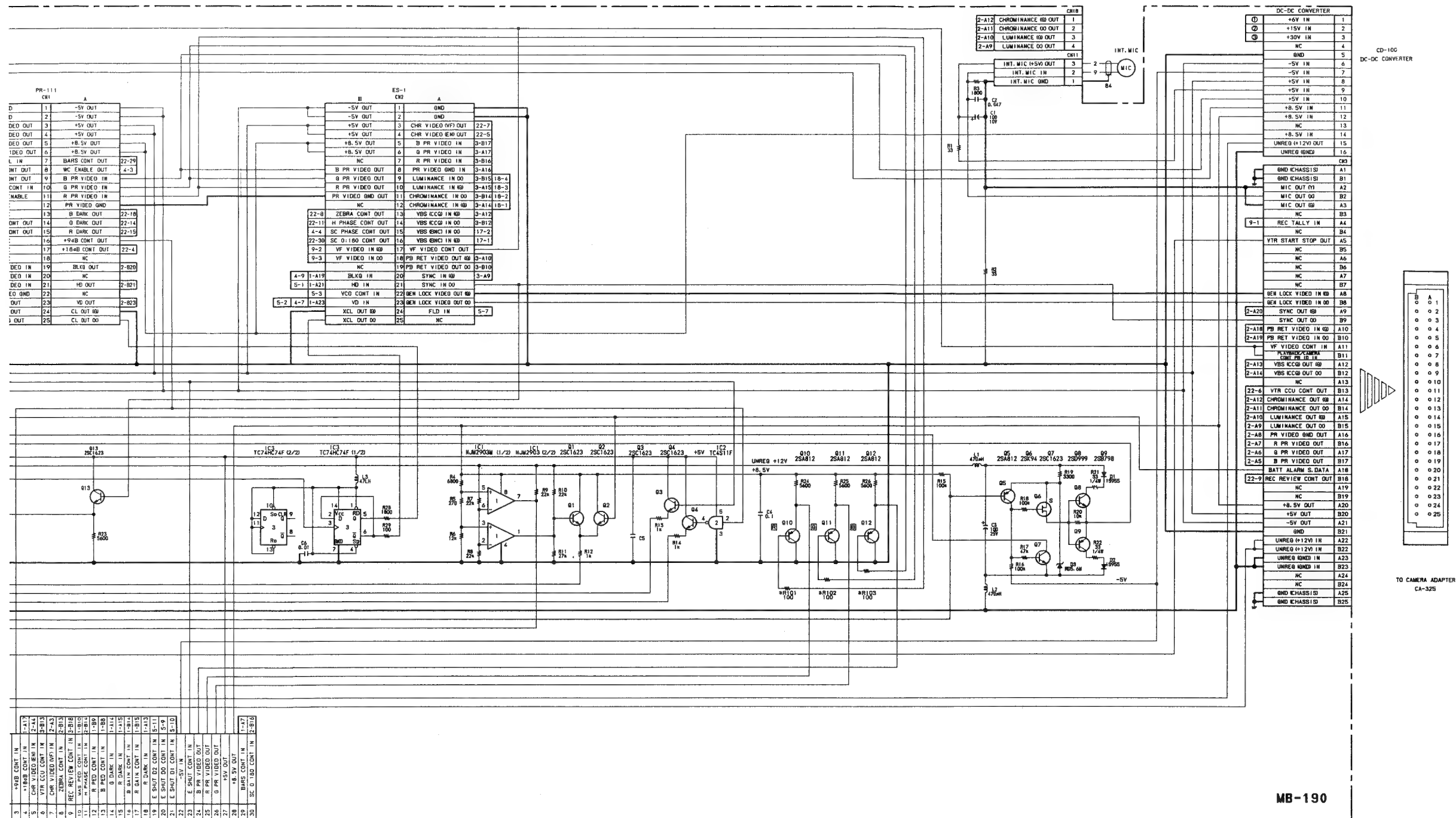
G-10
- Q10

J-9
- Q11

I-9
- Q12

I-9





AT-53

PR-111		IE-23	
CH1	CH2	CH1	CH2
1	CL OUT	1	DTL IN
2	CL OUT	2	R + VIDEO IN
3	VD OUT	3	G + VIDEO IN
4	ND OUT	4	G IE VIDEO IN
5	CLP3 OUT	5	-5V OUT
6	+18.4B CONT OUT	6	-5V OUT
7		7	+5V OUT
8		8	+5V OUT
9		9	+8.5V OUT
10		10	+8.5V OUT
11		11	GND
12		12	GND

* CHANGE INFORMATION

BOARD	REF. NO	DESCRIPTION	EFFECTIVE SER. NO
MB-190	R101, R102	100	10921 - (U)
	R103		30611 - (L)
			41521 - (E)

FRAME WIRING

MB-190 BOARD
SW-281 BOARD
SW-282 BOARD
DXC-325 (J, UC)
DXC-325P (EK)

SECTION D

SPARE PARTS

D-1. PARTS INFORMATION

1. Safety Related Component Warning

Components identified by shading marked with ! on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.

2. Replacement Parts supplied from Sony Parts Center will sometimes have different shape and outside view from the parts which actually in use. This is due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts." This manual's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present." Regarding engineering parts and diagrams changes in our engineering department, refer SONY service bulletions and service manual supplements.

3. The parts marked with "S" in the SP column of the exploded views and electical spare parts list are nomally required for routine service work. Orders for parts marked with "O" will be processed, but allow for additional delivery time.

4. Item with no parts number and/or no description are not stocked because they are seldom required for routine service.

5. Abbreviation


REF.No.	DESCRIPTION	REF.No.	DESCRIPTION	REF.No.	DESCRIPTION
C	CAPACITOR	IC	IC	RP	RESISTOR BLOCK
CN	CONNECTOR	J	JACK	RV	VARIABLE RESISTOR
CV	VARIABLE CAPACITOR	L	INDUCTOR	S	SWITCH
D	DIODE	LV	VARIABLE INDUCTOR	T	TRANSFORMER
DL	DELAY LINE	Q	TRANSISTOR	X	OSCILLATOR
FL	FILTER	R	RESISTOR		


All capacitors are in micro farads unless otherwise specified.


All inductors are in micro henries unless otherwise specified.


All resistors are in ohms.


D-2. SCREWS

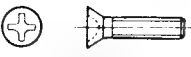
<div> <div>+B</div> <div>Bzn-N</div> <div>  </div> </div> <div>7-621-□□□-□□</div>	
SIZE	Parts No.
2 x 3	772-00
x 4	772-10
x 5	772-20
x 6	772-30
x 8	772-40
x 10	772-50
x 12	772-60
x 14	772-70
x 16	772-80
x 20	—
2.6 x 3	775-00
x 4	775-10
x 5	775-20
x 6	773-95
x 8	775-40
x 10	775-50
x 12	775-60
x 14	775-70
x 16	775-80
x 20	775-90


<div> <div>+B</div> <div>Cr-N</div> <div>  </div> </div> <div>7-621-□□□-□□</div>	
SIZE	Parts No.
2 x 3	772-08
x 4	772-18
x 5	771-06
x 6	772-38
x 8	772-48
x 10	772-58
x 12	772-68
x 14	772-78
x 16	772-88
x 20	—
2.6 x 3	775-08
x 4	773-86
x 5	770-87
x 6	770-67
x 8	770-99
x 10	773-87
x 12	775-68
x 14	775-78
x 16	775-88
x 20	773-91

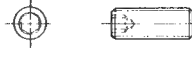
<div> <div>+B</div> <div>Bzn-N</div> <div>  </div> </div> <div>7-682-□□□-□□</div>	
SIZE	Parts No.
3 x 3	544-09
x 4	545-09
x 5	546-09
x 6	547-09
x 8	548-09
x 10	549-09
x 12	550-09
x 14	551-09
x 16	552-09
x 20	553-09
x 30	555-09
4 x 4	558-09
x 5	559-09
x 6	560-09
x 8	561-09
x 10	562-09
x 12	563-09
x 14	564-09
x 16	565-09
x 20	566-09
5 x 8	574-09
x 10	575-09
x 12	576-09
x 14	577-09
x 16	578-09
x 20	579-09


<div> <div>+B</div> <div>Cr-N</div> <div>  </div> </div> <div>7-682-□□□-□□</div>	
SIZE	Parts No.
3 x 3	544-04
x 4	545-04
x 5	546-04
x 6	547-04
x 8	548-04
x 10	549-04
x 12	550-04
x 14	551-04
x 16	552-04
x 20	553-04
4 x 4	558-04
x 5	559-04
x 6	560-04
x 8	561-04
x 10	562-04
x 12	563-04
x 14	564-04
x 16	565-04
x 20	566-04
5 x 8	574-04
x 10	575-04
x 12	576-04
x 14	577-04
x 16	578-04
x 20	579-04


<div> <div>+K</div> <div>Cr-N</div> <div>  </div> </div> <div>7-682-□□□-□□</div>	
SIZE	Parts No.
3 x 4	245-04
x 5	246-04
x 6	247-04
x 8	248-04
x 10	249-04
x 12	250-04
x 14	251-04
x 16	252-04
x 20	253-04
4 x 6	260-04
x 8	261-04
x 10	262-04
x 12	263-04
x 14	264-04
x 16	265-04
x 20	266-04

PRECISION +K Bzn-N	
	
7-627-□□□-□□	
SIZE	Parts No.
1.7 x 1.8	—
x 2	450-28
x 2.2	—
x 2.5	450-48
x 2.8	—
x 3	450-58
x 3.5	—
x 4	450-78
x 4.5	—
x 5	450-98
x 5.5	—
x 6	—
2 x 2	452-08
x 2.2	452-88
x 2.5	452-48
x 2.8	—
x 3	452-18
x 3.5	452-98
x 4	452-28
x 4.5	—
x 5	452-38
x 5.5	—
x 6	452-58
x 7	452-68
x 8	452-78
2.6 x 3.5	—
x 4	—
x 4.5	454-28
x 5	454-38
x 5.5	—
x 6	—
x 7	—
x 8	—

PRECISION +P Bzn-N	
	
7-627-□□□-□□	
SIZE	Parts No.
1.7 x 1.6	552-18
x 1.8	—
x 2	552-28
x 2.2	—
x 2.5	552-08
x 2.8	—
x 3	552-38
x 3.5	552-78
x 4	552-48
x 4.5	—
x 5	552-58
x 5.5	—
x 6	—
2 x 1.8	554-38
x 2	553-18
x 2.2	—
x 2.5	553-28
x 2.8	554-58
x 3	553-38
x 3.5	554-18
x 4	553-48
x 4.5	553-58
x 5	554-28
x 5.5	—
x 6	553-68
x 7	553-88
x 8	553-98
x 10	553-78
2.6 x 2.8	556-08
x 3	—
x 3.5	556-28
x 4	556-38
x 4.5	556-48
x 5	556-58
x 5.5	—
x 6	556-78
x 7	—
x 8	—
x 9	—
x 10	—

HEXAGON SET SCREW (FLAT) SNCM6-PD	
	
7-621-□□□-□□	
SIZE	Parts No.
2 x 2.5	731-08
2 x 3	732-08
2 x 4	733-08
2 x 5	—
2 x 6	—
2.6 x 3	737-08
2.6 x 4	738-08
2.6 x 5	739-08
2.6 x 6	740-08

TOTSU B Bzn-N	
	
7-621-□□□-□□	
SIZE	Parts No.
2 x 3	911-00
x 4	911-10
x 6	911-30
x 8	911-40
2.6 x 3	912-00
x 4	912-10
x 5	912-20
x 6	912-30
x 8	912-40
x 10	912-50
x 12	912-60
x 14	912-70
x 16	912-80
x 20	912-90

BOLT, HEXAGON SOCKET SNCM6 BZN-N4	
	
7-683-□□□-□□	
SIZE	Parts No.
3 x 4	401-04
3 x 5	402-04
3 x 6	403-04
3 x 8	404-04
3 x 10	405-04
3 x 12	406-04
3 x 14	407-04
3 x 16	408-04
3 x 20	410-04
4 x 5	417-04
4 x 6	418-04
4 x 8	419-04
4 x 10	420-04
4 x 12	421-04
4 x 14	422-04
4 x 16	423-04
4 x 20	425-04
4 x 25	427-04
5 x 8	434-04
5 x 10	435-04
5 x 12	436-04
5 x 14	437-04
5 x 16	438-04
5 x 20	440-04
5 x 25	442-04
5 x 30	444-04
5 x 50	447-04
6 x 10	452-04
6 x 12	453-04
6 x 14	454-04
6 x 16	455-04
6 x 20	457-04
6 x 25	459-04
6 x 30	461-04
6 x 35	463-04
6 x 40	465-04
6 x 45	466-04
6 x 55	468-04
8 x 12	470-04
8 x 14	471-04
8 x 16	472-04
8 x 20	473-04
8 x 25	474-04
8 x 30	475-04
8 x 35	476-04
8 x 40	477-04
8 x 45	478-04
8 x 50	479-04

D-3. EXPLODED VIEW

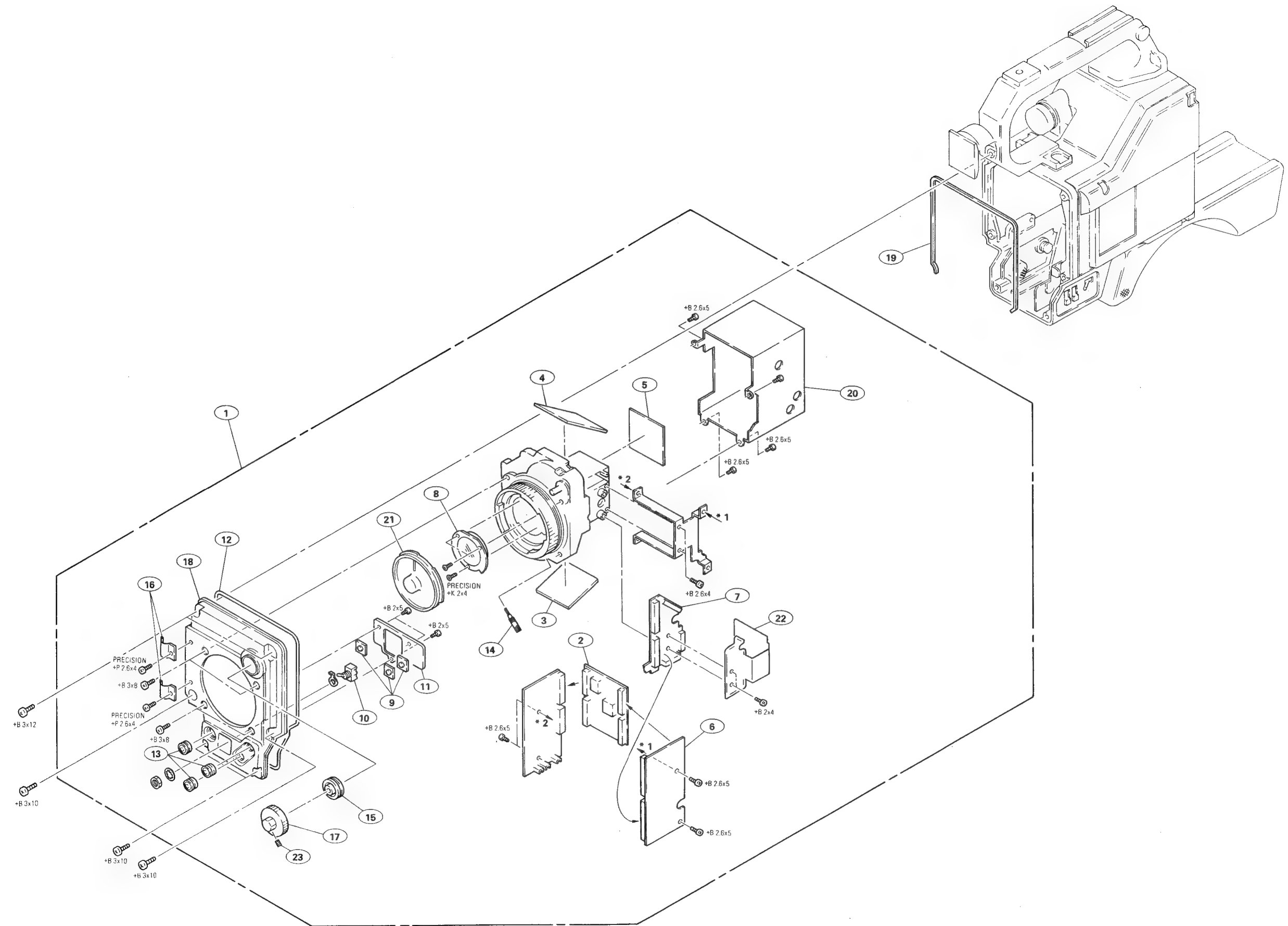
[CCD BLOCK]

No.	Parts No.	SP	Description
1	A-7575-123-A	s	CCD UNIT ASSY (N)
	A-7575-124-A	s	CCD UNIT ASSY (P)
2	A-7513-829-A	o	MOUNTED CIRCUIT BOARD (N) "TG-38"
	Ser No. 10001	to	11720(UC)
	30001	to	30840(J)
	40001	to	42530(EK)
	A-7515-001-A	o	MOUNTED CIRCUIT BOARD (N) "TG-38"
	Ser No. 11721	and higher	(UC)
	30841	and higher	(J)
	42531	and higher	(EK)
	A-7513-830-A	o	MOUNTED CIRCUIT BOARD (P) "TG-38"
	Ser No. 10001	to	11720(UC)
	30001	to	30840(J)
	40001	to	42530(EK)
	A-7513-998-A	o	MOUNTED CIRCUIT BOARD (P) "TG-38"
	Ser No. 11721	and higher	(UC)
	30841	and higher	(J)
	42531	and higher	(EK)
3	A-7513-831-A	s	MOUNTED CIRCUIT BOARD "PA-73"
4	A-7513-832-A	s	MOUNTED CIRCUIT BOARD "PA-74"
5	A-7513-833-A	s	MOUNTED CIRCUIT BOARD "PA-75"
6	A-7513-835-A	s	MOUNTED CIRCUIT BOARD "DR-68"
	Ser No. 10001	to	11720(UC)
	30001	to	30840(J)
	40001	to	42530(EK)
	A-7513-997-A	o	MOUNTED CIRCUIT BOARD "DR-68"
	Ser No. 11721	and higher	(UC)
	30841	and higher	(J)
	42531	and higher	(EK)
7	A-7513-836-A	s	MOUNTED CIRCUIT BOARD "CN-242"
8	1-547-301-11	o	FILTER UNIT, OPTICAL
	Ser No. 10001	to	10570(UC)
	40001	to	40920(EK)
	1-547-301-12	o	FILTER UNIT, OPTICAL
	Ser No. 10571	and higher	(UC)
	40921	and higher	(EK)
9	1-553-739-21	s	SWITCH, KEY BOARD "VTR" "UP/ON"
10	1-554-486-00	s	SWITCH, TOGGLE "AUTO W/B BAL"
11	1-627-922-11	s	PRINTED CIRCUIT BOARD "SW-282"
12	3-672-253-11	o	RUBBER, CONDUCTIVE
13	3-676-244-00	s	COVER, SWITCH
14	3-678-629-00	s	LEVER, MOUNT
15	3-678-632-00	o	PACKING, KNOB
16	3-678-684-00	o	HOLDER, CABLE
17	3-699-047-01	s	KNOB, FILTER
18	3-699-106-01	o	PANEL, FRONT
19	3-699-112-01	o	LABEL, RED
20	3-699-133-01	o	COVER, BLOCK SHIELD
21	3-699-144-01	s	CAP, MOUNT
22	3-699-146-01	o	PLATE, BLOCK SHIELD
23	3-701-506-01	s	SET SCREW, DUBLE POINT 3x4

CCD BLOCK

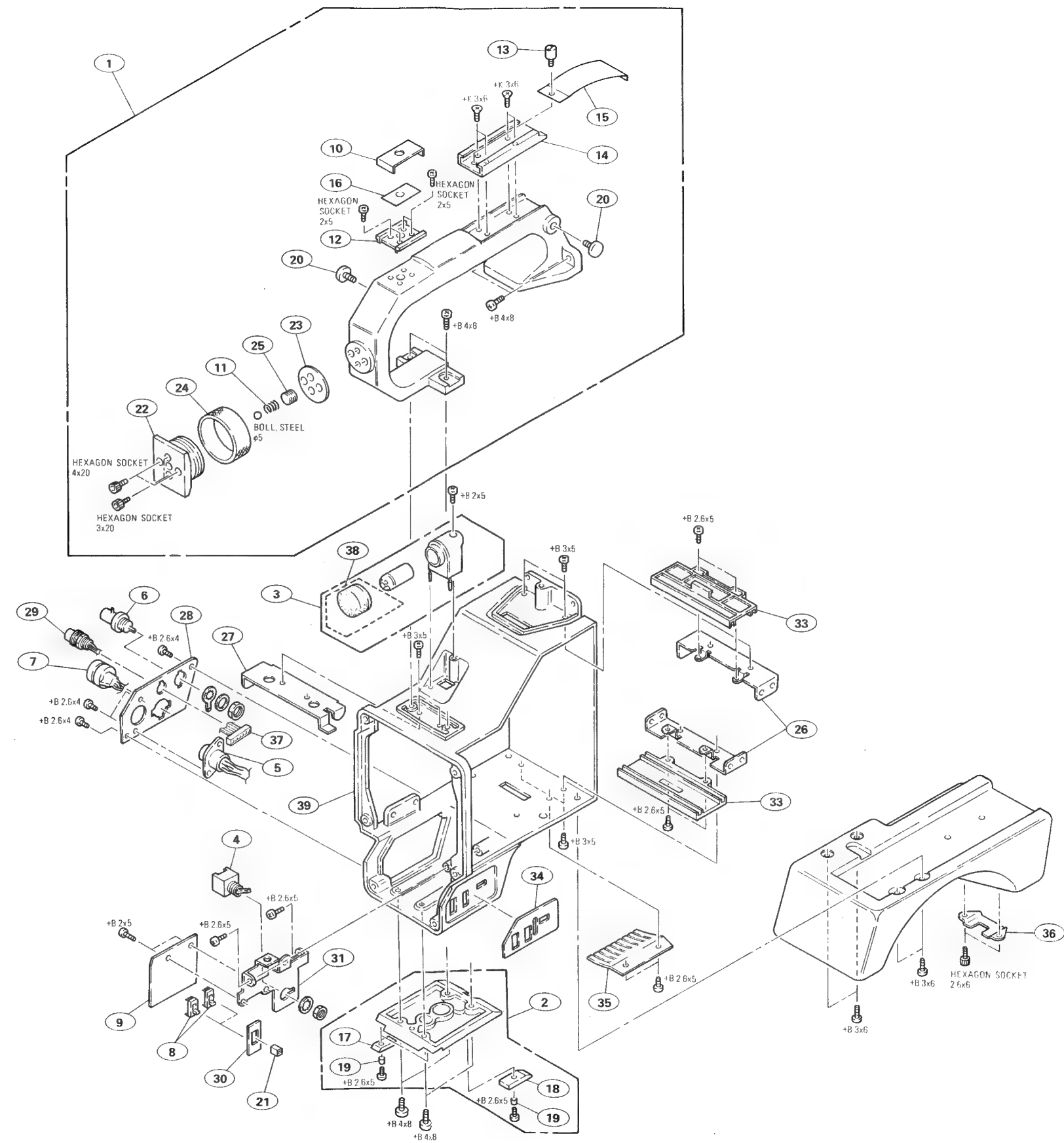
CCD BLOCK

CCD BLOCK



CHASSIS(1) BLOCK

CHASSIS(1) BLOCK CHASSIS(1) BLOCK



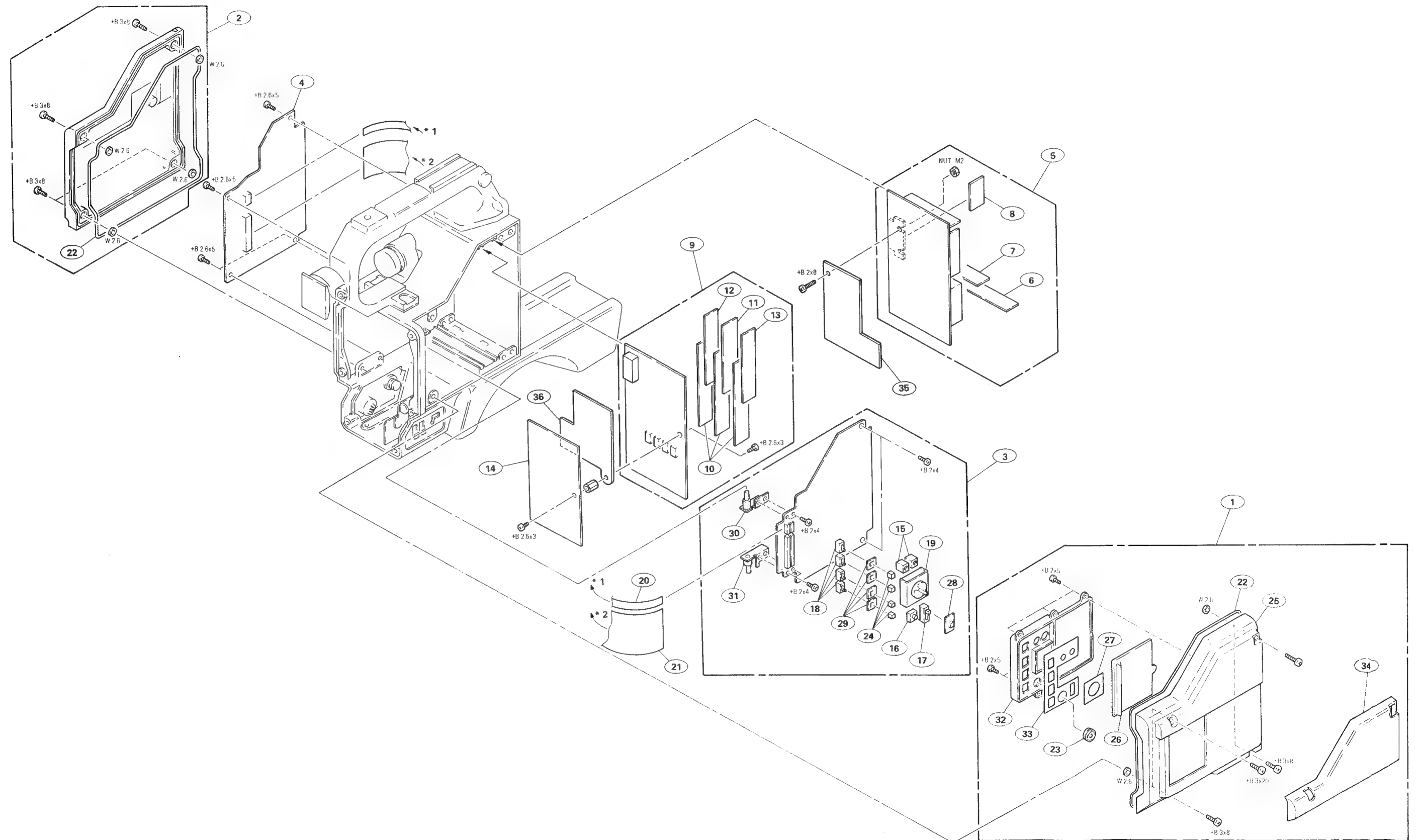
[CHASSIS (1) BLOCK]

No.	Parts No.	SP	Description
1	A-7420-144-A	o	HANDLE ASSY
2	X-3664-212-2	s	SHOE ASSY (B), T
3	1-542-112-11	s	MICROPHONE (C-2025)
4	1-553-972-00	s	SWITCH, TOGGLE "POWER"
5	1-561-320-00	s	SOCKET, DIN 8P "VF"
6	1-561-781-41	s	CONNECTOR, BNC "VIDEO OUT"
7	1-565-653-11	s	CONNECTOR, SMALL TYPE 8P "TITLE"
8	1-570-854-11	s	SWITCH, SLIDE "GAIN" "BARS WB"
9	1-627-915-11	o	PRINTED CIRCUIT BOARD "SW-281"
10	2-277-468-01	s	PLATE, ORNAMENTAL, CAMERA SHOE (B)
11	3-641-622-00	s	SPRING, COMPRESSION
12	3-657-700-00	o	BRACKET ACCESSORY
13	3-664-213-00	o	SCREW, STOPPER
14	3-664-218-00	o	SHOE
15	3-664-228-00	o	PLATE, SPRING
16	3-672-213-00	s	SHEET, ADHESIVE
17	3-675-963-02	s	FOOT, FRONT, RUBBER
18	3-675-964-01	s	FOOT, REAR, RUBBER
19	3-675-965-01	s	SPACER
20	3-676-379-00	s	SCREW, BUSHING (M5)
21	3-680-605-00	o	CAP, SLIDE
22	3-682-718-02	o	SHOE, VF SLIDE
23	3-682-758-01	o	SPACER
24	3-682-759-01	o	RING, LOCK
25	3-682-760-01	o	SCREW (M7-0.75), ADJUSTMENT
26	3-699-110-01	o	BRACKET (A)
27	3-699-111-01	o	BRACKET (B)
28	3-699-113-02	o	PLATE, CONNECTOR
29	1-562-222-41	s	RECEPTACLE, 6P FEMALE
30	3-699-126-01	o	PLATE, BLIND
31	3-699-129-01	o	STOPPER, SW
33	3-699-131-01	o	GUIDE, PC BOARD
34	3-699-132-01	o	LABEL, SW
35	3-699-145-01	o	PLATE, GROUND
36	3-699-176-01	o	STOPPER (2)
37	1-562-151-11	o	PLUG, HOUSING 6P
38	X-2536-714-1	o	WINDSCREEN ASSY
39	3-699-104-02	o	CABINET

[CHASSIS (2) BLOCK]

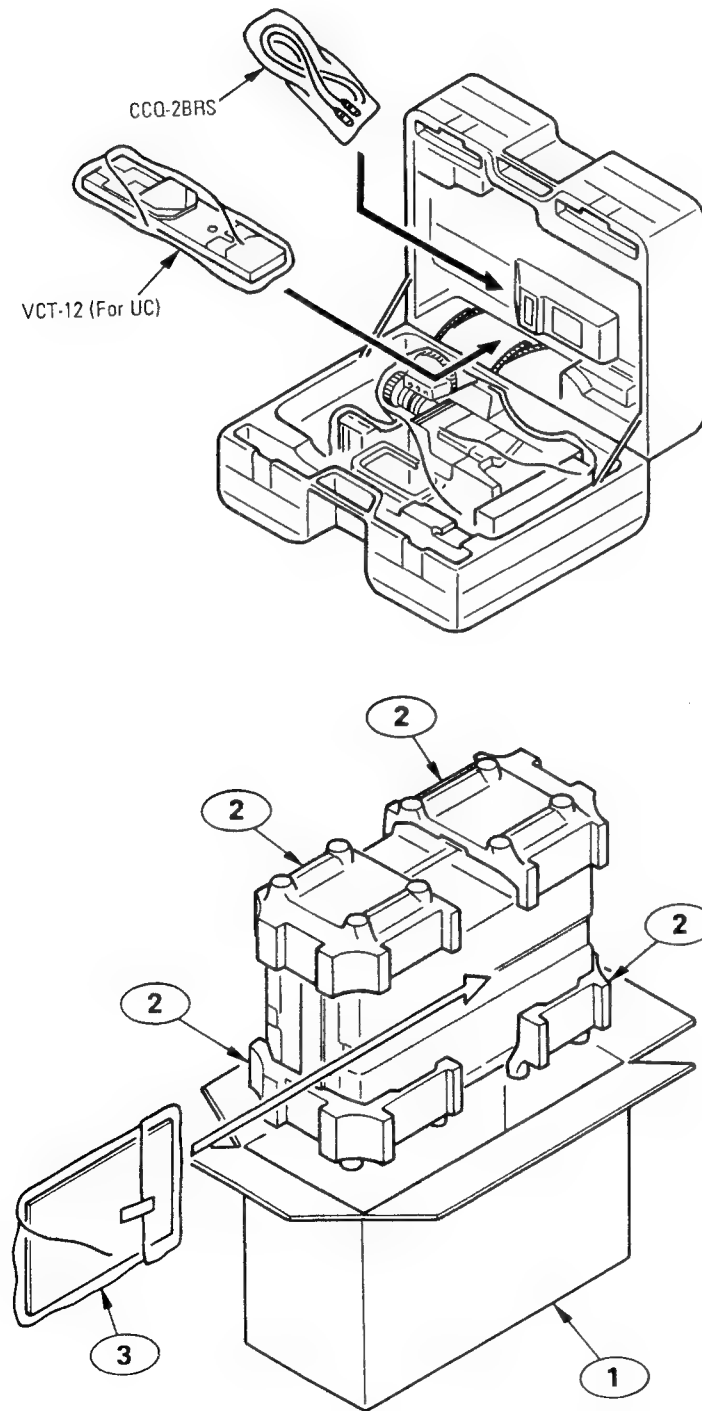
No.	Parts No.	SP	Description	No.	Parts No.	SP	Description
1	A-7420-141-B	o	PLATE (RIGHT) (N) ASSY, SIDE	16	1-554-303-11	s	SWITCH,PUSH "REC REVIEW"
	A-7420-142-A	o	PLATE (RIGHT) (P) ASSY, SIDE	17	1-554-364-00	s	SWITCH, SLIDE "DISP CHG"
	Ser No. 40001 to 40150			18	1-570-865-11	s	SWITCH, SLIDE "SC" "SHUTTER"
	A-7420-142-B	o	PLATE (RIGHT) (P) ASSY, SIDE				"ABC" "ZEBRA"
	Ser No. 40151 and higher			19	1-571-678-11	s	SWITCH, ROTARY "SHUTTER SPEED"
2	A-7420-143-A	o	PLATE (LEFT) ASSY, SIDE	20	1-574-144-11	o	WIRE, FLAT TYPE (10 CORE)
3	A-7513-837-A	o	MOUNTED CIRCUIT BOARD"AT-53"				
4	A-7513-838-A	o	MOUNTED CIRCUIT BOARD"MB-190"	21	1-574-145-11	o	WIRE, FLAT TYPE (30 CORE)
5	A-7513-839-A	o	MOUNTED CIRCUIT BOARD (N)	22	3-672-253-11	o	RUBBER, CONDUCTIVE
			"ES-1"	23	3-676-244-00	s	COVER, SWITCH
	A-7513-843-A	o	MOUNTED CIRCUIT BOARD (P)	24	3-680-605-00	o	CAP, SLIDE
			"ES-1"	25	3-699-107-01	o	PLATE (RIGHT), SIDE
6	A-7513-840-A	o	MOUNTED CIRCUIT BOARD (N)	26	3-699-121-01	o	PLATE, SLIDE
			"MX-18"		Ser No. 40001 to 40150(EK)		
	A-7513-844-A	o	MOUNTED CIRCUIT BOARD (P)		3-699-121-02	o	PLATE, SLIDE
			"MX-18"		Ser No. 10001 and higher(UC)		
7	A-7513-841-A	o	MOUNTED CIRCUIT BOARD (N)		40151 and higher(EK)		
			"CM-22"	27	3-699-122-01	o	LABEL (B), SW (N)
	A-7513-845-A	o	MOUNTED CIRCUIT BOARD (P)		3-699-122-11	o	LABEL (B), SW (P)
			"CM-22"	28	3-699-125-01	s	KNOB, DISPCGH
8	A-7513-842-A	o	MOUNTED CIRCUIT BOARD"BKG-4"	29	3-699-126-01	o	PLATE, BLIND
			(NTSC ONLY)	30	3-699-127-01	o	BRACKET (A), AT
9	A-7513-846-A	o	MOUNTED CIRCUIT BOARD (N)		Ser No. 10001 to 10570(UC)		
			"PR-111"		40001 to 40920(EK)		
	A-7513-847-A	o	MOUNTED CIRCUIT BOARD (P)		3-699-170-01	o	BRACKET (UPPER), AT
			"PR-111"		Sre No. 10571 and higher(UC)		
10	A-7513-848-A	o	MOUNTED CIRCUIT BOARD"PR-109"		30361 and higher(J)		
					40921 and higher(EK)		
11	A-7513-849-A	o	MOUNTED CIRCUIT BOARD"VA-70R"				
12	A-7513-850-A	o	MOUNTED CIRCUIT BOARD"VA-70G"	31	3-699-128-01	o	BRACKET (B), AT
13	A-7513-851-A	o	MOUNTED CIRCUIT BOARD"VA-70B"		Ser No. 10001 to 10570(UC)		
14	A-7513-853-A	o	MOUNTED CIRCUIT BOARD (N)		40001 to 40920(EK)		
			"IE-23"		3-699-171-01	o	BRACKET (LOWER), AT
	A-7513-854-A	o	MOUNTED CIRCUIT BOARD (P)		Sre No. 10571 and higher(UC)		
			"IE-23"		40921 and higher(EK)		
15	1-237-605-11	s	RES, VER, METAL 10K "PHASE H"	32	3-699-135-01	o	PLATE, SW
			"PHASE SC"	33	3-699-136-01	o	LABEL (A), SW
				34	3-699-137-01	s	PAD (C), SIDE
				35	3-699-178-01	o	PLATE, SHIELD ES
					Ser NO. 42081 and higher(EK)		
				36	3-699-179-01	o	PLATE, SHIELD IE
					Ser No. 11271 and higher(UC)		
					30811 and higher(J)		
					42081 and higher(EK)		

CHASSIS(2) BLOCK



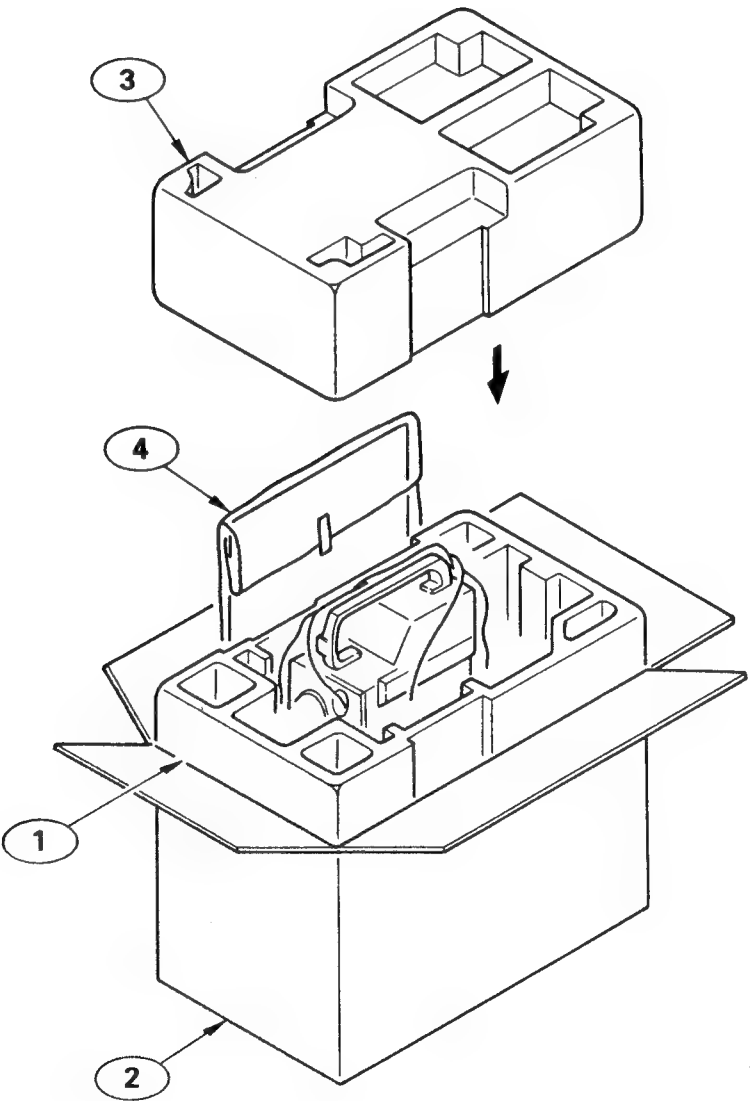
D-4. PACKING MATERIAL AND ACCESSORIES

No.	Parts No.	SP	Description
1	3-699-158-01	o	CARTON, INDIVIDUAL DXC-325K(J,UC)
	3-699-159-01	o	CARTON, INDIVIDUAL DXC-325PK(EK)
	3-699-160-01	o	CARTON, INDIVIDUAL DXC-325L(J,UC)
	3-699-161-01	o	CARTON, INDIVIDUAL DXC-325PL(EK)
2	3-699-162-01	o	CUSHION
3	3-701-630-01	o	BAG, POLY
	3-786-608-11	s	MANUAL, INSTRUCTION



D-13

No.	Parts No.	SP	Description
1	3-699-154-01	o	CUSHION (REAR)
2	3-699-155-01	o	CARTON, INDIVIDUAL DXC-325PH(EK)
	3-699-156-01	o	CARTON, INDIVIDUAL DXC-325H(J,UC)
3	3-699-157-01	o	CUTION (FRONT)
4	3-701-630-01	o	BAG, POLY
	3-786-608-01	s	MANUAL, INSTRUCTION(J,UC)
	3-786-608-31	s	MANUAL, INSTRUCTION(UC)
	3-786-608-41	s	MANUAL, INSTRUCTION(EK)
	3-786-608-51	s	MANUAL, INSTRUCTION(EK)



D-14

D-5. ELECTRICAL PARTS

Part No. SP Description

CAPACITOR, CHIP TANTALUM

0.1uF - 47uF +-10%/+-20% 6.3V/10V/16V/20V/25V/35V

1-135-070-00 s CAP, CHIP TANTALUM 0.1 10% 35V
1-135-071-21 s CAP, CHIP TANTALUM 0.15 10% 35V
1-135-072-21 s CAP, CHIP TANTALUM 0.22 10% 35V
1-135-073-00 s CAP, CHIP TANTALUM 0.33 10% 35V
1-135-083-00 s CAP, CHIP TANTALUM 0.47 10% 25V

1-135-074-21 s CAP, CHIP TANTALUM 0.47 10% 35V
1-135-087-21 s CAP, CHIP TANTALUM 0.68 10% 20V
1-135-075-21 s CAP, CHIP TANTALUM 0.68 10% 35V
1-135-091-21 s CAP, CHIP TANTALUM 1.0 10% 16V
1-135-076-21 s CAP, CHIP TANTALUM 1.0 10% 35V

1-135-084-21 s CAP, CHIP TANTALUM 1.5 10% 25V
1-135-077-21 s CAP, CHIP TANTALUM 1.5 10% 35V
1-135-088-21 s CAP, CHIP TANTALUM 2.2 10% 20V
1-135-078-21 s CAP, CHIP TANTALUM 2.2 10% 35V
1-135-092-21 s CAP, CHIP TANTALUM 3.3 10% 16V

1-135-079-21 s CAP, CHIP TANTALUM 3.3 10% 35V
1-135-096-21 s CAP, CHIP TANTALUM 4.7 10% 10V
1-135-085-21 s CAP, CHIP TANTALUM 4.7 10% 25V
1-135-100-21 s CAP, CHIP TANTALUM 6.8 10% 6.3V
1-135-089-21 s CAP, CHIP TANTALUM 6.8 10% 20V

1-135-093-21 s CAP, CHIP TANTALUM 10 10% 16V
1-135-097-21 s CAP, CHIP TANTALUM 15 10% 10V
1-135-101-21 s CAP, CHIP TANTALUM 22 10% 6.3V
1-135-098-21 s CAP, CHIP TANTALUM 47 10% 6.3V

Part No. SP Description

CAPACITOR, CHIP CERAMIC

1pF - 4pF CH +-0.25pF 50V
6pF - 8pF CH +-0.5pF 50V
10pF - 1000pF CH +-5% 50V
1500pF - 6800pF B +-10% 50V
0.01uF - 0.015uF B +-10% 50V
0.033uF - 0.047uF F +80/-20% 50V
0.068uF - 0.1uF F +80/-20% 25V

1-163-083-00 s CAP, CHIP CERAMIC 1pF +-0.25pF 5
1-163-085-00 s CAP, CHIP CERAMIC 2pF +-0.25pF 5
1-163-087-00 s CAP, CHIP CERAMIC 4pF +-0.25pF 5
1-163-089-00 s CAP, CHIP CERAMIC 6pF +-0.5pF 50
1-163-091-00 s CAP, CHIP CERAMIC 8pF +-0.5pF 50

1-163-093-00 s CAP, CHIP CERAMIC 10pF 5% 50V
1-163-097-00 s CAP, CHIP CERAMIC 15pF 5% 50V
1-163-101-00 s CAP, CHIP CERAMIC 22pF 5% 50V
1-163-105-00 s CAP, CHIP CERAMIC 33pF 5% 50V
1-163-109-00 s CAP, CHIP CERAMIC 47pF 5% 50V

1-163-113-00 s CAP, CHIP CERAMIC 68pF 5% 50V
1-163-117-00 s CAP, CHIP CERAMIC 100pF 5% 50V
1-163-121-00 s CAP, CHIP CERAMIC 150pF 5% 50V
1-163-125-00 s CAP, CHIP CERAMIC 220pF 5% 50V
1-163-129-00 s CAP, CHIP CERAMIC 330pF 5% 50V

1-163-133-00 s CAP, CHIP CERAMIC 470pF 5% 50V
1-163-137-00 s CAP, CHIP CERAMIC 680pF 5% 50V
1-163-141-00 s CAP, CHIP CERAMIC 1000pF 5% 50V
1-163-145-00 s CAP, CHIP CERAMIC 1500pF 10% 50V
1-163-013-00 s CAP, CHIP CERAMIC 2200pF 10% 50V

1-163-015-00 s CAP, CHIP CERAMIC 3300pF 10% 50V
1-163-017-00 s CAP, CHIP CERAMIC 4700pF 10% 50V
1-163-019-00 s CAP, CHIP CERAMIC 6800pF 10% 50V
1-163-021-00 s CAP, CHIP CERAMIC 0.01 10% 50V
1-163-023-00 s CAP, CHIP CERAMIC 0.015 10% 50V

1-163-034-00 s CAP, CHIP CERAMIC 0.033 50V
1-163-035-00 s CAP, CHIP CERAMIC 0.047 50V
1-163-036-00 s CAP, CHIP CERAMIC 0.068 50V
1-163-038-00 s CAP, CHIP CERAMIC 0.1 50V

Part No. SP Description

RESISTOR, CHIP

1/10W

0 - 3.3M (E12) +-5% 1/10W

1-216-295-00	s	RES, CHIP	0	5%	1/10W
1-216-298-00	s	RES, CHIP	2.2	5%	1/10W
1-216-302-00	s	RES, CHIP	2.7	5%	1/10W
1-216-304-00	s	RES, CHIP	3.3	5%	1/10W
1-216-306-00	s	RES, CHIP	3.9	5%	1/10W
1-216-308-00	s	RES, CHIP	4.7	5%	1/10W
1-216-309-00	s	RES, CHIP	5.6	5%	1/10W
1-216-311-00	s	RES, CHIP	6.8	5%	1/10W
1-216-313-00	s	RES, CHIP	8.2	5%	1/10W
1-216-001-00	s	RES, CHIP	10	5%	1/10W
1-216-003-00	s	RES, CHIP	12	5%	1/10W
1-216-005-00	s	RES, CHIP	15	5%	1/10W
1-216-007-00	s	RES, CHIP	18	5%	1/10W
1-216-009-00	s	RES, CHIP	22	5%	1/10W
1-216-011-00	s	RES, CHIP	27	5%	1/10W
1-216-013-00	s	RES, CHIP	33	5%	1/10W
1-216-015-00	s	RES, CHIP	39	5%	1/10W
1-216-017-00	s	RES, CHIP	47	5%	1/10W
1-216-019-00	s	RES, CHIP	56	5%	1/10W
1-216-021-00	s	RES, CHIP	68	5%	1/10W
1-216-023-00	s	RES, CHIP	82	5%	1/10W
1-216-025-00	s	RES, CHIP	100	5%	1/10W
1-216-027-00	s	RES, CHIP	120	5%	1/10W
1-216-029-00	s	RES, CHIP	150	5%	1/10W
1-216-031-00	s	RES, CHIP	180	5%	1/10W
1-216-033-00	s	RES, CHIP	220	5%	1/10W
1-216-035-00	s	RES, CHIP	270	5%	1/10W
1-216-037-00	s	RES, CHIP	330	5%	1/10W
1-216-039-00	s	RES, CHIP	390	5%	1/10W
1-216-041-00	s	RES, CHIP	470	5%	1/10W
1-216-043-00	s	RES, CHIP	560	5%	1/10W
1-216-045-00	s	RES, CHIP	680	5%	1/10W
1-216-047-00	s	RES, CHIP	820	5%	1/10W
1-216-049-00	s	RES, CHIP	1k	5%	1/10W
1-216-051-00	s	RES, CHIP	1.2k	5%	1/10W
1-216-053-00	s	RES, CHIP	1.5k	5%	1/10W
1-216-055-00	s	RES, CHIP	1.8k	5%	1/10W
1-216-057-00	s	RES, CHIP	2.2k	5%	1/10W
1-216-059-00	s	RES, CHIP	2.7k	5%	1/10W
1-216-061-00	s	RES, CHIP	3.3k	5%	1/10W
1-216-063-00	s	RES, CHIP	3.9k	5%	1/10W
1-216-065-00	s	RES, CHIP	4.7k	5%	1/10W
1-216-067-00	s	RES, CHIP	5.6k	5%	1/10W
1-216-069-00	s	RES, CHIP	6.8k	5%	1/10W
1-216-071-00	s	RES, CHIP	8.2k	5%	1/10W
1-216-073-00	s	RES, CHIP	10k	5%	1/10W
1-216-075-00	s	RES, CHIP	12k	5%	1/10W
1-216-077-00	s	RES, CHIP	15k	5%	1/10W
1-216-079-00	s	RES, CHIP	18k	5%	1/10W
1-216-081-00	s	RES, CHIP	22k	5%	1/10W

Part No. SP Description

1-216-083-00	s	RES, CHIP	27k	5%	1/10W
1-216-085-00	s	RES, CHIP	33k	5%	1/10W
1-216-087-00	s	RES, CHIP	39k	5%	1/10W
1-216-089-00	s	RES, CHIP	47k	5%	1/10W
1-216-091-00	s	RES, CHIP	56k	5%	1/10W
1-216-093-00	s	RES, CHIP	68k	5%	1/10W
1-216-095-00	s	RES, CHIP	82k	5%	1/10W
1-216-097-00	s	RES, CHIP	100k	5%	1/10W
1-216-099-00	s	RES, CHIP	120k	5%	1/10W
1-216-101-00	s	RES, CHIP	150k	5%	1/10W
1-216-103-00	s	RES, CHIP	180k	5%	1/10W
1-216-105-00	s	RES, CHIP	220k	5%	1/10W
1-216-107-00	s	RES, CHIP	270k	5%	1/10W
1-216-109-00	s	RES, CHIP	330k	5%	1/10W
1-216-111-00	s	RES, CHIP	390k	5%	1/10W
1-216-113-00	s	RES, CHIP	470k	5%	1/10W
1-216-115-00	s	RES, CHIP	560k	5%	1/10W
1-216-117-00	s	RES, CHIP	680k	5%	1/10W
1-216-119-00	s	RES, CHIP	820k	5%	1/10W
1-216-121-00	s	RES, CHIP	1.0M	5%	1/10W
1-216-123-00	s	RES, CHIP	1.2M	5%	1/10W
1-216-125-00	s	RES, CHIP	1.5M	5%	1/10W
1-216-127-00	s	RES, CHIP	1.8M	5%	1/10W
1-216-129-00	s	RES, CHIP	2.2M	5%	1/10W
1-216-131-00	s	RES, CHIP	2.7M	5%	1/10W
1-216-133-00	s	RES, CHIP	3.3M	5%	1/10W

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
AT-53 BOARD			D1	8-719-100-03	s 1S2835
A-7513-837-A o MOUNTED CIRCUIT BOARD			D2	8-719-100-03	s 1S2835
"AT-53"			D3	8-719-100-03	s 1S2835
			D4	8-719-100-03	s 1S2835
			D5	8-719-100-05	s 1S2837
C1	1-124-638-11	s ELECT 22uF 20% 10V	D6	8-719-101-23	s 1SS123
C8	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V	D7	8-719-100-05	s 1S2837
C10	1-135-155-21	s TANTAL, CHIP 4.7MF 20% 10V	D8	8-719-100-05	s 1S2837
C11	1-135-155-21	s TANTAL, CHIP 4.7MF 20% 10V	D9	8-719-100-05	s 1S2837
C13	1-124-234-00	s ELECT 22uF 20% 16V	D10	8-719-100-05	s 1S2837
C14	1-126-153-11	s ELECT 22uF 20% 6.3V	D11	8-719-100-05	s 1S2837
C15	1-131-365-00	s TANTALUM 10uF 10% 20V	D12	8-719-100-03	s 1S2835
C16	1-135-125-21	s TANTALUM, CHIP 33uF 20% 10V	D13	8-719-105-93	s RD5.6M-B1
C17	1-131-365-00	s TANTALUM 10uF 10% 20V	D14	8-719-100-03	s 1S2835
C18	1-123-661-00	s ELECT 100uF 20% 6.3V	D16	8-719-100-05	s 1S2837
C20	1-135-155-21	s TANTAL, CHIP 4.7MF 20% 10V	D18	8-719-101-23	s 1SS123
C21	1-124-638-11	s ELECT 22uF 20% 10V	D19	8-719-100-03	s 1S2835
C22	1-131-365-00	s TANTALUM 10uF 10% 20V	D20	8-719-100-05	s 1S2837
C24	1-124-638-11	s ELECT 22uF 20% 10V	D21	8-719-100-05	s 1S2837
C25	1-124-638-11	s ELECT 22uF 20% 10V	D22	8-719-100-03	s 1S2835
C26	1-135-155-21	s TANTAL, CHIP 4.7MF 20% 10V	D23	8-719-100-05	s 1S2837
C27	1-135-155-21	s TANTAL, CHIP 4.7MF 20% 10V	D24	8-719-100-03	s 1S2835
C28	1-131-375-00	s TANTALUM 4.7uF 10% 10V	D25	8-719-100-05	s 1S2837
C29	1-131-375-00	s TANTALUM 4.7uF 10% 10V	D26	8-719-100-03	s 1S2835
C32	1-124-255-00	s ELECT 1uF 20% 50V	D27	8-719-100-05	s 1S2837
C33	1-124-589-11	s ELECT 47uF 20% 16V	IC1	8-759-103-25	s UPD4053BG: NEC
C34	1-124-638-11	s ELECT 22uF 20% 10V	IC2	8-759-101-12	s UPC311G2: NEC
C35	1-123-611-00	s ELECT 1uF 20% 50V	IC3	8-759-700-07	s NJM2903M: JRC
C36	1-123-611-00	s ELECT 1uF 20% 50V	IC4	8-759-906-54	s TL064CNS: TOSHIBA
C37	1-130-489-00	s MYLAR 0.033uF 5% 50V	IC5	8-759-208-11	s TC4053BFHB: TOSHIBA
C38	1-164-161-11	s CERAMIC, CHIP 0.0022MF 10% 50V	IC6	8-759-908-17	s TL082CPS: TI
C39	1-123-611-00	s ELECT 1uF 20% 50V	IC7	8-759-906-54	s TL064CNS: TI
C41	1-124-638-11	s ELECT 22uF 20% 10V	IC8	8-759-200-82	s TC4069UBF: TOSHIBA
C42	1-131-365-00	s TANTALUM 10uF 10% 20V	IC9	8-759-303-31	s HD44860B42: HITACHI
C43	1-126-157-11	s ELECT 10uF 20% 16V	IC10	8-759-208-07	s TC4051BFHB: TOSHIBA
C44	1-124-638-11	s ELECT 22uF 20% 10V	IC11	8-759-208-07	s TC4051BFHB: TOSHIBA
C45	1-124-638-11	s ELECT 22uF 20% 10V	IC12	8-759-906-54	s TL064CNS: TI
C53	1-126-153-11	s ELECT 22uF 20% 6.3V	IC13	8-759-906-54	s TL064CNS: TI
C54	1-126-153-11	s ELECT 22uF 20% 6.3V	IC14	8-759-906-54	s TL064CNS: TI
C60	1-131-379-00	s TANTALUM 22uF 10% 10V	IC15	8-759-208-11	s TC4053BFHB: TOSHIBA
C65	1-126-157-11	s ELECT 10 20% 16V	IC16	8-759-400-89	s MN1237AD: MATSUSHITA
C66	1-125-443-11	s DOUBLE LAYERS 0.047F 5.5V	IC17	8-759-200-67	s TC4001BF: TOSHIBA
C67	1-135-091-00	s TANTALUM, CHIP 1uF 10% 16V	IC18	8-759-200-82	s TC4069UBF: TOSHIBA
CN1	1-566-512-11	s CONNECTOR, FPC (ZIF) 12P	IC19	8-759-208-11	s TC4053BFHB: TOSHIBA
CN2	1-565-210-11	s CONNECTOR, FPC (ZIF) 30P	IC20	8-759-209-90	s TC4571F: TOSHIBA
CN3	1-506-485-11	o CONNECTOR, 6P, MALE	IC21	8-759-209-15	s TC4SU69F: TOSHIBA
CN4	1-506-468-11	o CONNECTOR, 3P, MALE	Ser.No. 42081 and higher		

Ref. No. Part No. SP Description

L1 1-408-789-21 s CHIP 100μH

Q4 8-729-100-66 s 2SC1623-L6
Q5 8-729-402-19 s XN6501
Q6 8-729-402-19 s XN6501
Q9 8-729-100-66 s 2SC1623-L6
Q10 8-729-402-16 s XN4608

Q11 8-729-402-16 s XN4608
Q12 8-729-109-41 s 2SK94-X1
Q13 8-729-100-66 s 2SC1623-L6
Q14 8-729-100-66 s 2SC1623-L6
Q15 8-729-100-66 s 2SC1623-L6

Q16 8-729-102-65 s 2SC2757-T32
Q17 8-729-102-65 s 2SC2757-T32
Q18 8-729-100-75 s 2SA812-M5
Q19 8-729-100-66 s 2SC1623-L6
Q20 8-729-100-66 s 2SC1623-L6

Q27 8-729-100-66 s 2SC1623-L6
Q28 8-729-100-75 s 2SA812-M5
Q29 8-729-100-75 s 2SA812-M5
Q30 8-729-100-75 s 2SA812-M5
Q31 8-729-100-66 s 2SC1623-L6

Q32 8-729-100-66 s 2SC1623-L6
Q33 8-729-100-66 s 2SC1623-L6
Q34 8-729-100-66 s 2SC1623-L6
Q35 8-729-100-66 s 2SC1623-L6
Q36 8-729-100-66 s 2SC1623-L6

R161 1-216-748-11 s METAL, CHIP 39K 1% 1/10W

RB1 1-231-387-00 s RESISTOR BLOCK

RV1 1-237-603-11 s METAL 2.2K
RV2 1-237-606-11 s METAL 22K
RV3 1-237-603-11 s METAL 2.2K
RV4 1-237-609-11 s METAL 220K
RV5 1-237-518-21 s METAL 10K

RV6 1-237-518-21 s METAL 10K

S1 1-553-510-00 s SWITCH, SLIDE
S2 1-570-865-11 s SWITCH, SLIDE
S3 1-570-865-11 s SWITCH, SLIDE
S4 1-570-865-11 s SWITCH, SLIDE
S5 1-570-865-11 s SWITCH, SLIDE

S6 1-554-303-21 s SWITCH, KEY BOARD
S7 1-554-364-00 s SWITCH, SLIDE
S8 1-571-678-11 s SWITCH, ROTARY
S9 1-553-510-00 s SWITCH, SLIDE

X1 1-527-532-00 s OSCILLATOR, CERAMIC

Ref. No. Part No. SP Description

BC-15 BOARD

A-7513-834-A o MOUNTED CIRCUIT BOARD
"BC-15"

C1 1-124-120-11 s ELECT 220μF 20% 25V
C2 1-126-176-11 s ELECT 220μF 20% 10V

CN1 1-566-257-11 o CONNECTOR, BOARD TO BOARD
11P

CN2 1-566-257-11 o CONNECTOR, BOARD TO BOARD
11P

CN5 1-562-156-11 o HOUSING, CONNECTOR 11P
1-564-026-00 s CONTACT, FEMALE, AWG24-30

CN6 1-562-152-11 o HOUSING, CONNECTOR 7P

1-564-026-00 s CONTACT, FEMALE, AWG24-30

CN7 1-562-738-11 o HOUSING, CONNECTOR 5P

CN8 1-562-735-11 o HOUSING, CONNECTOR 2P

1-564-026-00 s CONTACT, FEMALE, AWG24-30

CN21 1-562-148-11 o HOUSING 3P

CN-242 BOARD

A-7513-836-A o MOUNTED CIRCUIT BOARD
"CN-242"

C4 1-135-125-21 s TANTALUM, CHIP 33μF 20% 10V
C15 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V

CN1 1-563-688-21 o CONNECTOR, BOARD TO BOARD
15P

CN2 1-563-686-21 o CONNECTOR, BOARD TO BOARD
13P

CN3 1-565-160-11 o PIN, CONNECTOR (ANGLE) 13P

CN4 1-565-150-11 o PIN, CONNECTOR (ANGLE) 3P

CN5 1-565-160-11 o PIN, CONNECTOR (ANGLE) 13P

CN6 1-565-151-11 o PIN, CONNECTOR (ANGLE) 4P

CN7 1-565-160-11 o PIN, CONNECTOR (ANGLE) 13P

CN8 1-565-150-11 o PIN, CONNECTOR (ANGLE) 3P

D1 8-719-100-05 s 1S2837

D2 8-719-100-05 s 1S2837

D3 8-719-100-05 s 1S2837

IC1 8-759-204-96 s TC74HC04F: TOSHIBA

IC2 8-759-204-96 s TC74HC04F: TOSHIBA

Ref. No. Part No. SP Description

DR-68 BOARD

A-7513-835-A o MOUNTED CIRCUIT BOARD
"DR-68"
Ser.No 10001 ~ 11720 (UC)
30001 ~ 30840 (J)
40001 ~ 42530 (EK)
A-7513-997-A o MOUNTED CIRCUIT BOARD
"DR-68"
Ser.No 11721 ~ (UC)
30841 ~ (J)
42531 ~ (EK)

C1 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C4 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C5 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C7 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C8 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V

C9 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C10 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C11 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C13 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C14 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V

C22 1-163-119-00 s CERAMIC, CHIP 120PF 5% 50V
C23 1-135-138-11 s TANTAL, CHIP 10MF 20% 20V
C24 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C29 1-135-159-21 s TANTAL, CHIP 10MF 20% 10V
C35 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V

C36 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C37 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C38 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C39 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C40 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V

C41 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V
C42 1-135-091-00 s TANTALUN, CHIP 1uF 20% 16V

CN1 1-566-257-11 o CONNECTOR, BOARD TO BOARD
11P
CN2 1-566-277-21 o CONNECTOR, BOARD TO BOARD
15P
CN3 1-566-275-21 o CONNECTOR, BOARD TO BOARD
13P
CN4 1-566-258-11 o CONNECTOR, BOARD TO BOARD
12P

D1 8-719-101-23 s 1SS123
D2 8-719-420-24 s MA123
D3 8-719-420-23 s MA122
D4 8-719-420-24 s MA123
D5 8-719-420-23 s MA122

D6 8-719-100-03 s 1S2835
D7 8-719-100-03 s 1S2835
D8 8-719-100-03 s 1S2835
D9 8-719-100-03 s 1S2835
D11 8-719-100-03 s 1S2835
D12 8-719-100-03 s 1S2835

Ref. No. Part No. SP Description

IC1 8-759-205-00 s TC74HC14F: TOSHIBA
IC2 8-759-204-98 s TC74HC08F: TOSHIBA
IC3 8-759-100-95 s UPC324G2: NEC
IC4 8-752-031-03 s CXA1065M: SONY
IC5 8-752-031-03 s CXA1065M: SONY

L1 1-408-783-00 s CHIP 33uH
L2 1-408-797-11 s CHIP 470uH
L3 1-408-783-00 s CHIP 33uH

Q1 8-729-104-06 s 2SD999-CK
Q2 8-729-100-66 s 2SC1623-L6
Q3 8-729-216-22 s 2SA812-M5
Q4 8-729-216-22 s 2SA812-M5
Q5 8-729-100-66 s 2SC1623-L6

Q6 8-729-100-66 s 2SC1623-L6
Q7 8-729-100-66 s 2SC1623-L6
Q8 8-729-100-66 s 2SC1623-L6
Q9 8-729-100-66 s 2SC1623-L6
Q10 8-729-100-66 s 2SC1623-L6

Q11 8-729-216-22 s 2SA812-M5
Q12 8-729-112-65 s 2SA1462
Q13 8-729-110-67 s NTM2369
Q14 8-729-100-66 s 2SC1623-L6

R1 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W
R2 1-216-686-11 s METAL, CHIP 30K 0.5% 1/10W
R36 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W
R37 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W

RV1 1-230-873-11 s METAL 47K
RV2 1-230-873-11 s METAL 47K
RV3 1-230-873-11 s METAL 47K
RV4 1-230-867-11 s METAL 1K

Ref. No. Part No. SP Description

ES-1 BOARD

A-7513-843-A o MOUNTED CIRCUIT BOARD
"ES-1"(CM-22, MX-18)

C1 1-124-589-11 s ELECT 47uF 20% 16V
C2 1-126-154-11 s ELECT 47uF 20% 6.3V
C3 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C4 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C5 1-163-086-00 s CERAMIC, CHIP 3PF 50V

C6 1-126-157-11 s ELECT 10uF 20% 16V
C7 1-163-088-00 s CERAMIC, CHIP 5PF 50V
C8 1-123-661-00 s ELECT 100uF 20% 6.3V
C9 1-124-584-00 s ELECT 100uF 20% 10V
C10 1-126-157-11 s ELECT 10uF 20% 16V

C11 1-135-124-21 s TANTALUM, CHIP 22uF 20% 10V
C12 1-124-638-11 s ELECT 22uF 20% 10V
C13 1-124-638-11 s ELECT 22uF 20% 10V
C14 1-124-589-11 s ELECT 47uF 20% 16V
C16 1-124-589-11 s ELECT 47uF 20% 16V

C18 1-126-157-11 s ELECT 10uF 20% 16V
C19 1-163-090-00 s CERAMIC, CHIP 7PF 50V
C20 1-124-638-11 s ELECT 22uF 20% 10V
C21 1-126-157-11 s ELECT 10uF 20% 16V
C22 1-126-157-11 s ELECT 10uF 20% 16V

C23 1-123-661-00 s ELECT 100uF 20% 6.3V
C24 1-124-589-11 s ELECT 47uF 20% 16V
C26 1-124-638-11 s ELECT 22uF 20% 10V
C28 1-124-234-00 s ELECT 22uF 20% 16V
C30 1-126-176-11 s ELECT 220uF 20% 10V

C34 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C36 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C37 1-123-661-00 s ELECT 100uF 20% 6.3V
C38 1-163-099-00 s CERAMIC, CHIP 18PF 5% 50V
C39 1-135-124-21 s TANTALUM, CHIP 22uF 20% 10V

C42 1-131-381-00 s TANTALUM 47uF 10% 10V
C44 1-126-176-11 s ELECT 220uF 20% 10V
C46 1-126-157-11 s ELECT 10uF 20% 16V
C56 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C60 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V

C61 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C63 1-163-245-00 s CERAMIC, CHIP 56PF 5% 50V
C64 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V
C70 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C203 1-126-157-11 s ELECT 10uF 20% 16V

CN1 1-565-780-11 o CONNECTOR, TX(P.L)
(PC BOARD)50P

CP1 1-577-183-11 s OSCILLATOR, CRYSTAL

Ref. No. Part No. SP Description

D1 8-719-100-03 s 1S2835
D2 8-719-100-03 s 1S2835
Ser.No. 42081 and higher

DL1 1-415-306-00 s 340ns

FL1 1-235-181-00 s BAND PASS 4.43MHz

IC1 8-759-933-79 s UA711CNS: FSC
IC2 8-759-208-11 s TC4053BFHB: TOSHIBA
IC3 8-759-204-57 s TC40H076AF: TOSHIBA
IC4 8-759-200-82 s TC4069UBF: TOSHIBA

IC5 1-807-836-11 s IC,SEP: SONY
IC6 1-808-513-12 s IB-38: SONY
Ser.No 41521 ~
IC7 8-759-907-81 s SN74LS221NS: TI
IC8 8-741-134-00 s BX1340: SONY
IC9 1-808-514-11 s IB-37: SONY

IC10 8-757-930-11 s CX7930A: SONY

L1 1-408-781-00 s CHIP 22uH
L2 1-408-777-00 s CHIP 10uH
L3 1-408-781-00 s CHIP 22uH
L4 1-408-781-00 s CHIP 22uH
L6 1-408-781-00 s CHIP 22uH

L7 1-408-781-00 s CHIP 22uH
L8 1-408-781-00 s CHIP 22uH
L9 1-408-785-21 s CHIP 47uH
L10 1-408-781-00 s CHIP 22uH
L11 1-408-785-21 s CHIP 47uH

L12 1-408-785-21 s CHIP 47uH
L13 1-408-783-00 s CHIP 33uH
L14 1-408-785-21 s CHIP 47uH
L15 1-408-785-21 s CHIP 47uH
L16 1-408-785-21 s CHIP 47uH

L17 1-408-785-21 s CHIP 47uH
L18 1-408-783-21 s CHIP 33uH
L19 1-408-785-21 s CHIP 47uH
L20 1-408-785-21 s CHIP 47uH
L101 1-408-777-00 s CHIP 10uH
L201 1-408-785-21 s CHIP 47uH

LV1 1-408-844-00 s 22uH

Ref. No. Part No. SP Description

Q1	8-729-402-16	s XN4608
Q2	8-729-402-19	s XN6501
Q3	8-729-100-75	s 2SA812-M5
Q4	8-729-402-19	s XN6501
Q5	8-729-402-78	s XN6401
Q6	8-729-100-66	s 2SC1623-L6
Q7	8-729-102-65	s 2SC2757-T32
Q8	8-729-100-75	s 2SA812-M5
Q9	8-729-402-19	s XN6501
Q10	8-729-100-66	s 2SC1623-L6
Q11	8-729-100-66	s 2SC1623-L6
Q12	8-729-402-19	s XN6501
Q13	8-729-402-19	s XN6501
Q14	8-729-100-75	s 2SA812-M5
Q15	8-729-100-66	s 2SC1623-L6
Q20	8-729-109-41	s 2SK94-X1
R1	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R2	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R4	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
R6	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R7	1-216-668-11	s METAL, CHIP 5.1K 0.5% 1/10W
R8	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
R9	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R10	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
R11	1-216-644-11	s METAL, CHIP 510 0.5% 1/10W
R12	1-218-254-11	s METAL CHIP 2.55K 0.50% 1/10W
R13	1-218-259-11	s METAL CHIP 13.7K 0.50% 1/10W
R14	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R15	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R17	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R21	1-216-624-11	s METAL, CHIP 75 0.5% 1/10W
R22	1-216-624-11	s METAL, CHIP 75 0.5% 1/10W
R26	1-218-254-11	s METAL CHIP 2.55K 0.50% 1/10W
R27	1-218-257-11	s METAL CHIP 4.99K 0.50% 1/10W
R30	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W
R31	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W
R33	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R37	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R44	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R45	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W

Ref. No. Part No. SP Description

R47	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W
R74	1-216-649-11	s METAL, CHIP 820 0.5% 1/10W
R78	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R79	1-216-649-11	s METAL, CHIP 820 0.5% 1/10W
R85	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R87	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
R108	1-216-661-11	s METAL, CHIP 2.7K 0.5% 1/10W
R112	1-249-421-11	s CARBON 2.2K 5% 1/4W
R113	1-249-428-11	s CARBON 8.2K 5% 1/4W
R201	1-249-417-11	s CARBON 1K 5% 1/4W (EK) Ser No. 40001 to 41520
R202	1-249-429-11	s CARBON 10K 5% 1/4W (EK) Ser No. 40001 to 41520
RV1	1-230-523-11	s METAL 10K
RV2	1-230-519-11	s METAL 470
RV3	1-238-221-11	s METAL 2.2K
RV4	1-238-219-11	s METAL 470
RV6	1-230-522-11	s METAL 4.7K
RV7	1-230-521-11	s METAL 2.2K

CM-22 BOARD

A-7513-845-A o MOUNTED CIRCUIT BOARD
"CM-22"

C2	1-135-124-21	s TANTALUM, CHIP 22uF 20% 10V
C5	1-135-124-21	s TANTALUM, CHIP 22uF 20% 10V
C7	1-163-114-00	s CERAMIC, CHIP 75PF 5% 50V
C9	1-163-114-00	s CERAMIC, CHIP 75PF 5% 50V
CN1	1-564-549-11	o PIN, BOARD TO BOARD 10P
IC1	8-759-906-59	s CX22017: SONY
Q1	8-729-100-66	s 2SC1623-L6
Q2	8-729-100-66	s 2SC1623-L6
Q3	8-729-100-66	s 2SC1623-L6
R2	1-216-637-11	s METAL, CHIP 270 0.5% 1/10W
R3	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
R4	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
R8	1-216-637-11	s METAL, CHIP 270 0.5% 1/10W
R9	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
R10	1-216-677-11	s METAL, CHIP 12K 0.5% 1/10W
R11	1-216-644-11	s METAL, CHIP 510 0.5% 1/10W

Ref. No. Part No. SP Description

MX-18 BOARD

A-7513-844-A o MOUNTED CIRCUIT BOARD
"MX-18"

C1	1-163-090-00	s CERAMIC, CHIP 7PF 50V
C3	1-163-099-00	s CERAMIC, CHIP 18PF 5% 50V
C11	1-135-124-21	s TANTALUM, CHIP 22uF 20% 10V
CN1	1-566-093-11	o PIN, BOARD TO BOARD 8P
CN2	1-506-592-11	o CONNECOTR, 4P
L1	1-408-795-21	s CHIP 330uH
L2	1-408-795-21	s CHIP 330uH
Q1	8-729-403-31	s XN6435
Q2	8-729-402-16	s XN4608
Q3	8-729-402-19	s XN6501
Q4	8-729-100-66	s 2SC1623-L6
Q5	8-729-402-78	s XN6401
Q6	8-729-402-19	s XN6501
Q7	8-729-100-66	s 2SC1623-L6
Q8	8-729-100-75	s 2SA812-M5
Q9	8-729-402-78	s XN6401
R1	1-218-254-11	s METAL CHIP 2.55K 0.50% 1/10W
R2	1-218-257-11	s METAL CHIP 4.99K 0.50% 1/10W
R3	1-218-259-11	s METAL CHIP 13.7K 0.50% 1/10W
R6	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R7	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R8	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W
R12	1-218-254-11	s METAL CHIP 2.55K 0.50% 1/10W
R13	1-218-259-11	s METAL CHIP 13.7K 0.50% 1/10W
R14	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R15	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R17	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R21	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R26	1-218-254-11	s METAL CHIP 2.55K 0.50% 1/10W
R27	1-218-257-11	s METAL CHIP 4.99K 0.50% 1/10W
R30	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W
R31	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W
R33	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R37	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
RV1	1-238-220-11	s METAL 1K
RV2	1-228-394-00	s METAL 4.7K
RV3	1-238-221-11	s METAL 2.2K
RV4	1-238-219-11	s METAL 470

Ref. No. Part No. SP Description

IE-23 BOARD

A-7513-854-A o MOUNTED CIRCUIT BOARD
"IE-23"

C2	1-131-361-00	s TANTALUM 2.2MF 10% 20V
C3	1-126-154-11	s ELECT 47uF 20% 6.3V
C7	1-163-098-00	s CERAMIC, CHIP 16PF 5% 50V
C9	1-124-589-11	s ELECT 47uF 20% 16V
C16	1-124-589-11	s ELECT 47uF 20% 16V
C18	1-123-661-00	s ELECT 100uF 20% 6.3V
C19	1-126-096-11	s ELECT 10uF 20% 25V
C21	1-163-102-00	s CERAMIC, CHIP 24PF 5% 50V
C24	1-126-154-11	s ELECT 47uF 20% 6.3V
C25	1-124-589-11	s ELECT 47uF 20% 16V
C26	1-131-377-00	s TANTALUM 10uF 10% 10V
C32	1-131-365-00	s TANTALUM 10uF 10% 20V
C33	1-126-096-11	s ELECT 10uF 20% 25V
C35	1-126-096-11	s ELECT 10uF 20% 25V
C36	1-126-096-11	s ELECT 10uF 20% 25V
C37	1-126-096-11	s ELECT 10uF 20% 25V
C40	1-124-589-11	s ELECT 47uF 20% 16V
C42	1-126-176-11	s ELECT 220uF 20% 10V
C43	1-124-120-11	s ELECT 220uF 20% 25V
C44	1-124-638-11	s ELECT 22uF 20% 10V
C46	1-124-229-00	s ELECT 33uF 20% 10V
C49	1-131-361-00	s TANTALUM 2.2MF 10% 20V
C51	1-124-638-11	s ELECT 22uF 20% 10V
C52	1-124-638-11	s ELECT 22uF 20% 10V
C53	1-124-638-11	s ELECT 22uF 20% 10V
CN1	1-566-268-21	o CONNECTOR, BOARD TO BOARD 6P
CN2	1-566-274-21	o CONNECTOR, BOARD TO BOARD 12P
D1	8-719-105-28	s RD2.4M-B
D2	8-719-100-05	s 1S2837
IC1	8-759-420-12	s MN3801: MATHUSHITA
IC2	8-758-150-00	s CX815: SONY
IC3	8-759-209-15	s TC4SU69F: TOSHIBA
L1	1-408-422-00	s 120uH
L4	1-410-470-11	s 10uH
L5	1-408-413-00	s 22uH
L7	1-410-470-11	s 10uH
L8	1-410-470-11	s 10uH
L9	1-408-413-00	s 22uH
L10	1-408-413-00	Ser.No 40001 ~ 42080
L11	1-408-425-00	s 220uH
L12	1-408-429-00	s 470uH

Ref. No. Part No. SP Description

Q1 8-729-100-66 s 2SC1623-L6
Q3 8-729-100-66 s 2SC1623-L6
Q4 8-729-100-66 s 2SC1623-L6
Q5 8-729-100-75 s 2SA812-M5
Q6 8-729-100-75 s 2SA812-M5

Q7 8-729-100-66 s 2SC1623-L6
Q8 8-729-100-75 s 2SA812-M5
Q9 8-729-100-75 s 2SA812-M5
Q10 8-729-100-75 s 2SA812-M5
Q12 8-729-122-63 s 2SA1226-E3

Q13 8-729-100-66 s 2SC1623-L6
Q14 8-729-122-63 s 2SA1226-E3
Q15 8-729-102-65 s 2SC2757-T32
Q16 8-729-102-65 s 2SC2757-T32
Q17 8-729-102-65 s 2SC2757-T32

Q18 8-729-100-66 s 2SC1623-L6
Q19 8-729-100-66 s 2SC1623-L6
Q20 8-729-100-66 s 2SC1623-L6
Q21 8-729-100-66 s 2SC1623-L6
Q22 8-729-100-66 s 2SC1623-L6

Q23 8-729-109-41 s 2SK94-X1
Q24 8-729-100-66 s 2SC1623-L6
Q25 8-729-100-66 s 2SC1623-L6
Q27 8-729-100-75 s 2SA812-M5
Q28 8-729-100-66 s 2SC1623-L6

Q29 8-729-100-66 s 2SC1623-L6
Q30 8-729-100-66 s 2SC1623-L6
Q31 8-729-122-63 s 2SA1226-E4
Q32 8-729-100-66 s 2SC1623-L6
Q33 8-729-100-66 s 2SC1623-L6

Q34 8-729-122-63 s 2SA1226-E4
Q35 8-729-100-75 s 2SA812-M5
Q36 8-729-122-63 s 2SA1226-E4
Q37 8-729-100-75 s 2SA812-M5
Q38 8-729-100-75 s 2SA812-M5

Q39 8-729-100-66 s 2SC1623-L6
Q40 8-729-100-75 s 2SA812-M5
Q41 8-729-100-66 s 2SC1623-L6
Q42 8-729-100-75 s 2SA812-M5
Q43 8-729-100-75 s 2SA812-M5
Q44 8-729-100-75 s 2SA812-M5

R6 1-216-748-11 s RES ,CHIP 39K 5% 1/10W
R13 1-216-748-11 s METAL, CHIP 39K 1% 1/10W

RV1 1-226-773-11 s METAL 22K
RV2 1-226-772-11 s METAL 4.7K
RV3 1-228-519-00 s METAL 2.2K
RV4 1-226-772-11 s METAL 4.7K
RV5 1-228-395-00 s METAL 10K
RV6 1-226-702-00 s METAL 2.2K

S1 1-553-977-00 s SWITCH, SLIDE

Ref. No. Part No. SP Description

MB-190 BOARD

A-7513-838-A o MOUNTED CIRCUIT BOARD
"MB-190"

C1 1-124-584-00 s ELECT 100uF 20% 10V
C3 1-124-148-00 s ELECT 100uF 20% 25V
C7 1-124-148-00 s ELECT 100uF 20% 25V
C8 1-124-148-00 s ELECT 100uF 20% 25V

CN1 1-565-781-11 o CONNECTOR,TX(S.S)
(PC BOARD)50P
CN2 1-565-781-11 o CONNECTOR,TX(S.S)
(PC BOARD)50P
CN3 1-566-579-11 o CONNECTOR, MULTI 50P
CN4 1-566-512-11 s CONNECTOR, FPC (ZIF) 12P
CN5 1-506-490-21 o PIN, CONNECTOR 11P

CN6 1-506-471-11 o CONNECTOR, 6P, MALE
1-562-151-11 o PLUG HOUSING 6P
1-564-026-11 o PLUG CONTACT
CN7 1-566-199-11 o PIN, CONNECTOR
(PC BOARD) 6P
CN8 1-506-467-11 o CONNECTOR, 2P, MALE
CN9 1-506-487-11 o CONNECTOR, 8P, MALE
1-562-153-11 o PLUG HOUSING, 8P
1-564-026-00 o PLUG CONTACT
CN10 1-560-356-00 o CONNECTOR POST HEADER,
1LG (2P)

CN11 1-506-468-11 o CONNECTOR, 3P, MALE
CN13 1-506-487-11 o CONNECTOR, 8P, MALE
1-562-153-11 o PLUG HOUSING, 8P
1-564-026-00 o PLUG CONTACT
CN14 1-506-481-11 o CONNECTOR, 2P, MALE
CN15 1-506-481-11 o CONNECTOR, 2P, MALE
CN16 1-506-481-11 o CONNECTOR, 2P, MALE

CN17 1-506-481-11 o CONNECTOR, 2P, MALE
1-562-147-11 o PLUG HOUSING, 2P
1-564-026-00 o PLUG CONTACT
CN18 1-506-469-11 o CONNECTOR, 4P, MALE
CN19 1-506-472-11 o CONNECTOR, 7P, MALE
CN21 1-506-482-11 o CONNECTOR, 3P, MALE
CN22 1-565-210-11 s CONNECTOR, FPC (ZIF) 30P

D1 8-719-108-13 s 1S955
D2 8-719-108-13 s 1S955
D3 8-719-105-93 s RD5.6M-B1

IC1 8-759-700-07 s NJM2903M: JRC
IC2 8-759-209-69 s TC4S11F-TE85L: TOSHIBA
IC3 8-759-205-06 s TC74HC74F: TOSHIBA

L1 1-408-096-00 s 470UH
L2 1-408-096-00 s 470UH
L3 1-408-785-21 s CHIP 47UH

PU1 1-466-039-11 s DC-DC CONVERTER

Ref. No. Part No. SP Description

Q1 8-729-100-66 s 2SC1623-L6
 Q2 8-729-100-66 s 2SC1623-L6
 Q3 8-729-100-66 s 2SC1623-L6
 Q4 8-729-100-66 s 2SC1623-L6
 Q5 8-729-100-75 s 2SA812-M5

 Q6 8-729-109-41 s 2SK94-X1
 Q7 8-729-100-66 s 2SC1623-L6
 Q8 8-729-199-91 s 2SD999-CM
 Q9 8-729-101-07 s 2SB798-DL
 Q10 8-729-100-75 s 2SA812-M5

 Q11 8-729-100-75 s 2SA812-M5
 Q12 8-729-100-75 s 2SA812-M5
 Q13 8-729-100-66 s 2SC1623-L6

R4 1-216-671-11 s METAL FILM CHIP 6.8K 0.5%
 1/10W
 Ser.No. 40921 and higher
 R5 1-216-637-11 s METAL FILM CHIP 270 0.5%
 1/10W
 Ser.No. 40921 and higher
 R6 1-216-677-11 s METAL FILM CHIP 12K 0.5%
 1/10W
 Ser.No. 40921 and higher
 R7 1-216-683-11 s METAL FILM CHIP 22K 0.5%
 1/10W
 Ser.No. 40921 and higher
 R8 1-216-683-11 s METAL FILM CHIP 22K 0.5%
 1/10W
 Ser.No. 40921 and higher
 R21 1-249-399-11 s CARBON 33 5% 1/4W
 R22 1-249-399-11 s CARBON 33 5% 1/4W
 !R27 1-216-369-11 s METAL OXIDE FILM 1 5% 2W

PA-73 BOARD

A-7513-831-A o MOUNTED CIRCUIT BOARD
 "PA-73"

 1-564-026-00 s CONTACT, FEMALE, AWG24-30
 1-565-164-11 o TERMINAL, SOLDERLESS
 1-566-987-11 o TERMINAL, SOLDERLESS

C4 1-135-091-00 s TANTALUM, CHIP 1uF 10% 16V
 C6 1-135-142-21 s TANTAL, CHIP 22MF 20% 16V
 C8 1-135-142-21 s TANTAL, CHIP 22MF 20% 16V
 C9 1-163-037-11 s CERAMIC, CHIP 0.022uF 5%
 25V
 C22 1-163-037-11 s CERAMIC, CHIP 0.022uF 5%
 25V

 C23 1-126-162-11 s ELECT 3.3uF 20% 50V
 C24 1-126-162-11 s ELECT 3.3uF 20% 50V
 C25 1-135-091-00 s TANTALUM, CHIP 1uF 10% 16V

Ref. No. Part No. SP Description

CN1 1-565-794-11 o HOUSING, CONNECTOR 13P
 1-565-132-11 o HOUSING, CONNECTOR 13P
 CN2 1-566-989-11 o HOUSING, CONNECTOR 3P
 1-565-122-11 o HOUSING, CONNECTOR 3P
 CN3 1-562-147-11 o HOUSING, CONNECTOR 2P

CV1 1-141-284-00 s CAP, TRIMMER

D1 8-719-100-05 s 1S2837

LP1 1-235-839-11 s FILTER, LOW PASS

Q1 8-729-102-65 s 2SC2757-T32
 Q2 8-729-100-75 s 2SA812-M5
 Q3 8-769-401-67 s 3SK163-1
 Q4 8-729-100-66 s 2SC1623-L6
 Q5 8-729-100-75 s 2SA812-M5

 Q6 8-769-401-67 s 3SK163-1
 Q7 8-729-100-66 s 2SC1623-L6
 Q11 8-729-100-75 s 2SA812-M5
 Q12 8-769-401-67 s 3SK163-1
 Q13 8-729-100-66 s 2SC1623-L6

 Q17 8-729-100-66 s 2SC1623-L6
 Q18 8-729-100-66 s 2SC1623-L6
 Q19 8-729-100-66 s 2SC1623-L6
 Q20 8-729-100-66 s 2SC1623-L6
 Q21 8-729-100-75 s 2SA812-M5

 Q22 8-729-100-66 s 2SC1623-L6
 Q24 8-729-100-66 s 2SC1623-L6

R3 1-216-678-11 s METAL, CHIP 13K 0.5% 1/10W
 R10 1-216-748-11 s METAL, CHIP 39K 1% 1/10W
 R32 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
 R33 1-216-627-11 s METAL, CHIP 100 0.5% 1/10W
 R35 1-216-662-11 s METAL, CHIP 3K 0.5% 1/10W

 R36 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W
 R46 1-216-748-11 s METAL, CHIP 39K 1% 1/10W

Ref. No. Part No. SP Description

PA-74 BOARD

A-7513-832-A o MOUNTED CIRCUIT BOARD
"PA-74"

1-564-026-00 s CONTACT, FEMALE, AWG24-30
1-565-164-11 o TERMINAL, SOLDERLESS
1-566-987-11 o TERMINAL, SOLDERLESS

C4 1-135-091-00 s TANTALUM, CHIP 1uF 10% 16V
C6 1-131-367-00 s TANTALUM 22uF 10% 20V
C8 1-131-367-00 s TANTALUM 22uF 10% 20V
C9 1-163-037-11 s CERAMIC, CHIP 0.022uF 5% 25V
C15 1-163-111-00 s CERAMIC, CHIP 56PF 5% 50V

C22 1-163-037-11 s CERAMIC, CHIP 0.022uF 5% 25V
C24 1-126-162-11 s ELECT 3.3uF 20% 50V
C25 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C27 1-135-091-00 s TANTALUM, CHIP 1uF 10% 16V

CN1 1-565-794-11 o HOUSING, CONNECTOR 13P
1-565-132-11 o HOUSING, CONNECTOR 13P
CN2 1-566-989-11 o HOUSING, CONNECTOR 3P
1-565-122-11 o HOUSING, CONNECTOR 3P
CN3 1-562-147-11 o HOUSING, CONNECTOR 2P

CV1 1-141-284-00 s CAP, TRIMMER

D1 8-719-100-05 s 1S2837

LP1 1-235-839-11 s FILTER, LOW PASS

Q1 8-729-102-65 s 2SC2757-T32
Q2 8-729-100-75 s 2SA812-M5
Q3 8-769-401-67 s 3SK163-1
Q4 8-729-100-66 s 2SC1623-L6
Q5 8-729-100-75 s 2SA812-M5

Q6 8-769-401-67 s 3SK163-1
Q7 8-729-100-66 s 2SC1623-L6
Q11 8-729-100-75 s 2SA812-M5
Q12 8-769-401-67 s 3SK163-1
Q13 8-729-100-66 s 2SC1623-L6

Q17 8-729-100-66 s 2SC1623-L6
Q18 8-729-100-66 s 2SC1623-L6
Q19 8-729-100-66 s 2SC1623-L6
Q20 8-729-100-66 s 2SC1623-L6
Q21 8-729-100-75 s 2SA812-M5

Q22 8-729-100-66 s 2SC1623-L6
Q24 8-729-100-66 s 2SC1623-L6

Ref. No. Part No. SP Description

R3 1-216-678-11 s METAL, CHIP 13K 0.5% 1/10W
R10 1-216-748-11 s METAL, CHIP 39K 1% 1/10W
R32 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
R33 1-216-627-11 s METAL, CHIP 100 0.5% 1/10W
R35 1-216-662-11 s METAL, CHIP 3K 0.5% 1/10W

R36 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W
R46 1-216-748-11 s METAL, CHIP 39K 1% 1/10W

PA-75 BOARD

A-7513-833-A o MOUNTED CIRCUIT BOARD
"PA-75"

1-564-026-00 s CONTACT, FEMALE, AWG24-30
1-565-164-11 o TERMINAL, SOLDERLESS
1-566-987-11 o TERMINAL, SOLDERLESS

C4 1-135-091-00 s TANTALUM, CHIP 1uF 10% 16V
C6 1-135-142-21 s TANTAL, CHIP 22MF 20% 16V
C8 1-135-142-21 s TANTAL, CHIP 22MF 20% 16V
C9 1-163-037-11 s CERAMIC, CHIP 0.022uF 5%
25V
C22 1-163-037-11 s CERAMIC, CHIP 0.022uF 5%
25V
C27 1-135-091-00 s TANTALUM, CHIP 1uF 10% 16V

CN1 1-565-794-11 o HOUSING, CONNECTOR 13P
1-565-132-11 o HOUSING, CONNECTOR 13P
CN2 1-566-990-11 o HOUSING, CONNECTOR 4P
1-565-123-11 o HOUSING, CONNECTOR 4P
CN3 1-562-147-11 o HOUSING, CONNECTOR 2P

CV1 1-141-284-00 s CAP, TRIMMER

D1 8-719-100-05 s 1S2837

LP1 1-235-839-11 s FILTER, LOW PASS

Q1 8-729-102-65 s 2SC2757-T32
Q2 8-729-100-75 s 2SA812-M5
Q3 8-769-401-67 s 3SK163-1
Q4 8-729-100-66 s 2SC1623-L6
Q5 8-729-100-75 s 2SA812-M5

Q6 8-769-401-67 s 3SK163-1
Q7 8-729-100-66 s 2SC1623-L6
Q8 8-729-100-75 s 2SA812-M5
Q9 8-769-401-67 s 3SK163-1
Q10 8-729-100-66 s 2SC1623-L6

Ref. No. Part No. SP Description

Q11 8-729-100-75 s 2SA812-M5
 Q12 8-769-401-67 s 3SK163-1
 Q13 8-729-100-66 s 2SC1623-L6
 Q14 8-729-100-75 s 2SA812-M5
 Q15 8-769-401-67 s 3SK163-1
 Q16 8-729-100-66 s 2SC1623-L6
 Q17 8-729-100-66 s 2SC1623-L6
 Q18 8-729-100-66 s 2SC1623-L6
 Q19 8-729-100-66 s 2SC1623-L6
 Q20 8-729-100-66 s 2SC1623-L6
 Q21 8-729-100-75 s 2SA812-M5
 Q22 8-729-100-66 s 2SC1623-L6
 Q24 8-729-100-66 s 2SC1623-L6

R3 1-216-678-11 s METAL, CHIP 13K 0.5% 1/10W
 R10 1-216-748-11 s METAL, CHIP 39K 1% 1/10W
 R22 1-216-088-00 s METAL, CHIP 43K 5% 1/10W
 R32 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
 R33 1-216-627-11 s METAL, CHIP 100 0.5% 1/10W
 R35 1-216-662-11 s METAL, CHIP 3K 0.5% 1/10W
 R36 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W
 R46 1-216-748-11 s METAL, CHIP 39K 1% 1/10W

PR-111 BOARD

A-7513-847-A o MOUNTED CIRCUIT BOARD
 "PR-111"(PR-109,VA-70R/G/B)

C1 1-124-638-11 s ELECT 22uF 20% 10V
 C2,C3, 1-163-111-00 s CERAMIC CHIP 56PF 5% 50V
 C4,C5 Ser No. 41521 and higher (EK)

C14 1-124-589-11 s ELECT 47uF 20% 16V
 C24 1-124-472-11 s ELECT 470uF 20% 10V
 C25 1-124-471-00 s ELECT 1000uF 20% 6.3V
 C26 1-124-471-00 s ELECT 1000uF 20% 6.3V

C27 1-126-157-11 s ELECT 10uF 20% 16V
 C28 1-126-157-11 s ELECT 10uF 20% 16V
 C29 1-126-157-11 s ELECT 10uF 20% 16V
 C37 1-126-157-11 s ELECT 10uF 20% 16V
 C39 1-124-589-11 s ELECT 47uF 20% 16V

C41 1-126-157-11 s ELECT 10uF 20% 16V
 C42 1-126-157-11 s ELECT 10uF 20% 16V
 C43 1-126-157-11 s ELECT 10uF 20% 16V
 C44 1-124-472-11 s ELECT 470uF 20% 10V
 C47 1-126-157-11 s ELECT 10uF 20% 16V

C48 1-126-157-11 s ELECT 10uF 20% 16V
 C50 1-102-106-21 s CERAMIC 100PF 10% 50V
 Ser.No 40001 ~ 42080

CN1 1-563-679-21 o CONNECTOR, BOARD TO BOARD
 6P
 CN2 1-563-685-21 o CONNECTOR, BOARD TO BOARD
 12P
 CN3 1-565-780-11 o CONNECTOR,TX(P.L)
 (PC BOARD)50P

Ref. No. Part No. SP Description

D1 8-719-100-05 s 1S2837
 D2 8-719-100-05 s 1S2837
 D3 8-719-100-05 s 1S2837
 D4 8-719-911-19 s 1SS119
 Ser.No 40001 ~ 42080
 8-719-100-03 s 1S2835
 Ser.No 42081 ~
 D6 8-719-914-12 s HZ4BLL
 D7 8-719-914-12 s HZ4BLL
 D8 8-719-914-12 s HZ4BLL
 D9 8-719-100-03 s 1S2835
 D10 8-719-100-03 s 1S2835
 D12 8-719-105-52 s RD3.6M-B2
 D13 8-719-105-52 s RD3.6M-B2

DL1 1-415-307-00 s 165nS
 DL2 1-415-307-00 s 165nS
 DL3 1-415-307-00 s 165nS

IC1 8-759-204-40 s TC40H027F: TOSHIBA
 IC2 8-759-201-50 s TC40H193F: TOSHIBA
 IC3 8-759-201-63 s TC40H032F: TOSHIBA
 IC4 8-759-201-53 s TC40H000F: TOSHIBA
 IC5 8-759-209-97 s TC4S81F: TOSHIBA

IC6 8-759-209-97 s TC4S81F: TOSHIBA
 IC7 8-759-204-51 s TC40H008F: TOSHIBA
 IC8 8-759-208-11 s TC4053BFHB: TOSHIBA
 IC9 8-759-209-97 s TC4S81F: TOSHIBA
 IC10 8-759-209-97 s TC4S81F: TOSHIBA

IC11 8-759-209-15 s TC4SU69F: TOSHIBA
 IC12 8-759-209-54 s TC4S01F: TOSHIBA
 IC13 8-759-209-15 s TC4SU69F: TOSHIBA
 IC14 8-759-209-90 s TC4S71F: TOSHIBA
 IC15 8-759-209-90 s TC4S71F: TOSHIBA

IC16 8-759-209-90 s TC4S71F: TOSHIBA
 IC17 8-759-209-90 s TC4S71F: TOSHIBA

Q1 8-729-102-65 s 2SC2757-T32
 Q2 8-729-102-65 s 2SC2757-T32
 Q3 8-729-102-65 s 2SC2757-T32
 Q4 8-729-102-65 s 2SC2757-T32
 Q5 8-729-109-41 s 2SK94-X1

Q6 8-729-100-66 s 2SC1623-L6
 Q7 8-729-901-46 s DTA114YK
 Q8 8-729-900-52 s DTC114YK
 Q9 8-729-900-52 s DTC114YK
 Q10 8-729-100-75 s 2SA812-M5

Q11 8-729-100-75 s 2SA812-M5
 Q12 8-729-100-75 s 2SA812-M5
 Q13 8-729-100-66 s 2SC1623-L6
 Q14 8-729-100-75 s 2SA812-M5
 Q15 8-729-100-75 s 2SA812-M5

Ref. No. Part No. SP Description

Q16 8-729-100-66 s 2SC1623-L6
Q17 8-729-100-75 s 2SA812-M5
Q18 8-729-100-66 s 2SC1623-L6
Q19 8-729-100-66 s 2SC1623-L6
Q20 8-729-100-66 s 2SC1623-L6

Q21 8-729-100-66 s 2SC1623-L6
Q22 8-729-100-66 s 2SC1623-L6
Q23 8-729-100-66 s 2SC1623-L6
Q24 8-729-100-66 s 2SC1623-L6
Q25 8-729-100-66 s 2SC1623-L6

Q26 8-729-901-46 s DTA114YK
Q31 8-729-100-75 s 2SA812-M5
Q32 8-729-100-75 s 2SA812-M5
Q33 8-729-100-66 s 2SC1623-L6
Q34 8-729-100-66 s 2SC1623-L6

R24 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
R25 1-216-665-11 s METAL, CHIP 3.9K 0.5% 1/10W
R26 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W
R27 1-216-686-11 s METAL, CHIP 30K 0.5% 1/10W
R28 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
R29 1-216-665-11 s METAL, CHIP 3.9K 0.5% 1/10W
R30 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W
R31 1-216-686-11 s METAL, CHIP 30K 0.5% 1/10W
R32 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
R33 1-216-665-11 s METAL, CHIP 3.9K 0.5% 1/10W
R34 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W
R35 1-216-686-11 s METAL, CHIP 30K 0.5% 1/10W
R69 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
R70 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
R78 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
R79 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
R84 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
R85 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W

RV1 1-226-703-11 s METAL 10K
RV2 1-226-771-11 s METAL 1K
RV3 1-226-771-11 s METAL 1K
RV4 1-226-771-11 s METAL 1K
RV5 1-226-771-11 s METAL 1K

RV6 1-238-222-11 s METAL 4.7K
RV7 1-238-222-11 s METAL 4.7K
RV8 1-238-222-11 s METAL 4.7K
RV9 1-226-702-00 s METAL 2.2K
RV10 1-226-702-00 s METAL 2.2K

RV11 1-226-702-00 s METAL 2.2K
RV12 1-238-225-11 s METAL 47K
RV13 1-238-225-11 s METAL 47K
RV14 1-238-225-11 s METAL 47K
RV15 1-238-225-11 s METAL 47K
RV16 1-238-225-11 s METAL 47K

Ref. No. Part No. SP Description

PR-109 BOARD

A-7513-848-A o MOUNTED CIRCUIT BOARD
"PR-109"

C2 1-135-091-00 s TANTALUM, CHIP 1uF 10% 16V
C3 1-135-091-00 s TANTALUM, CHIP 1uF 10% 16V
C4 1-135-091-00 s TANTALUM, CHIP 1uF 10% 16V
C9 1-163-088-00 s CERAMIC, CHIP 5PF 50V
C11 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C15 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V
C16 1-135-159-21 s TANTAL, CHIP 10MF 20% 16V

CN1 1-566-094-11 o PIN, BOARD TO BOARD 9P
CN2 1-566-093-11 o PIN, BOARD TO BOARD 8P

D1 8-719-100-03 s 1S2835
D2 8-719-100-03 s 1S2835
D3 8-719-942-31 s HZ3ALL
D4 8-719-100-03 s 1S2835
D5 8-719-100-03 s 1S2835

IC1 8-759-030-16 s TL062ACPS: TI
IC2 8-759-030-16 s TL062ACPS: TI

Q1 8-729-100-66 s 2SC1623-L6
Q2 8-729-100-66 s 2SC1623-L6
Q3 8-729-100-66 s 2SC1623-L6
Q4 8-729-109-41 s 2SK94-X1
Q5 8-729-122-63 s 2SA1226

Q6 8-729-100-66 s 2SC1623-L6
Q7 8-729-100-66 s 2SC1623-L6
Q8 8-729-102-65 s 2SC2757-T32
Q9 8-729-109-41 s 2SK94-X1
Q10 8-729-402-78 s XN6401

Q11 8-729-402-78 s XN6401
Q12 8-729-402-19 s XN6501
Q13 8-729-100-66 s 2SC1623-L6

Ref. No.	Part No.	SP Description
R15	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R16	1-216-631-11	s METAL, CHIP 150 0.5% 1/10W
R17	1-216-653-11	s METAL, CHIP 1.2K 0.5% 1/10W
R18	1-216-627-11	s METAL, CHIP 100 0.5% 1/10W
R19	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W
R22	1-216-648-11	s METAL, CHIP 750 0.5% 1/10W
R23	1-216-653-11	s METAL, CHIP 1.2K 0.5% 1/10W
R24	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R26	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
R27	1-216-683-11	s METAL, CHIP 22K 0.5% 1/10W
R28	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W

RV1	1-238-219-11	s METAL 470
RV2	1-238-222-11	s METAL 4.7K

VA-70 BOARD

A-7513-849-A o MOUNTED CIRCUIT BOARD "VA-70R"		
A-7513-850-A o MOUNTED CIRCUIT BOARD "VA-70G"		
A-7513-851-A o MOUNTED CIRCUIT BOARD "VA-70B"		
C1	1-163-088-00	s CERAMIC, CHIP 5PF 50V(G,R) Ser.No 40001 ~ 42080
C2	1-163-088-00	s CERAMIC, CHIP 5PF 50V(B,R)
C3	1-163-088-00	s CERAMIC, CHIP 5PF 50V
C9	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V
C10	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V
C13	1-163-088-00	s CERAMIC, CHIP 5PF 50V
C14	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V
C17	1-163-088-00	s CERAMIC, CHIP 5PF 50V
C18	1-135-099-00	s TANTALUM, CHIP 2.2uF 10% 6.3V
C21	1-135-145-11	s TANTALUM, CHIP 0.47uF 10% 35V
C23	1-135-159-21	s TANTAL, CHIP 10MF 20% 16V
C25	1-102-942-00	s CERAMIC 5PF +0.5PF 50V (G,R) Ser No. 42081 ~ 42850
	1-102-936-00	s CERAMIC 3PF +0.25PF 50V (B) Ser No. 42081 ~ 42850
	1-163-088-00	s CERAMIC 5PF +0.25PF 50V (G,R) Ser No. 42851 ~
	1-163-086-00	s CERAMIC 3PF +0.25PF 50V (B) Ser No. 42851 ~

Ref. No.	Part No.	SP Description
CN1	1-566-093-11	o PIN, BOARD TO BOARD 8P
CN2	1-566-093-11	o PIN, BOARD TO BOARD 8P

D1	8-719-100-03	s 1S2835 Ser.No 40001 ~ 42080
D2	8-719-100-03	s 1S2835 Ser.No 40001 ~ 42080
D3	8-719-100-03	s 1S2835
D4	8-719-100-03	s 1S2835
D5	8-719-100-03	s 1S2835
D6	8-719-951-12	s HZ5BLL
D7	8-719-100-03	s 1S2835

IC1	8-759-700-95	s NJM1496M: JRC
IC2	8-759-030-16	s TL062ACPS: TI

Q1,Q2	8-729-109-41	s 2SK94-X1 Ser No. 10001 ~ 10920 (UC) 30001 ~ 30610 (J) 40001 ~ 42080 (EK)
	8-729-109-43	s 2SK94-X3 Ser No. 10921 and higher (UC) 30611 and higher (J) 42081 and higher (EK)
Q3	8-729-100-66	s 2SC1623-L6
Q4	8-729-100-66	s 2SC1623-L6
Q5	8-729-122-63	s 2SA1226

Q6	8-729-122-63	s 2SA1226
Q7	8-729-100-75	s 2SA812-M5
Q8	8-729-402-19	s XN6501
Q9	8-729-109-43	s 2SK94-X3
Q10	8-729-109-43	s 2SK94-X3
Q11	8-729-109-43	s 2SK94-X3
Q12	8-729-109-43	s 2SK94-X3
Q13	8-729-402-16	s XN4608
Q14	8-729-100-75	s 2SA812-M5
Q15	8-729-102-65	s 2SC2757-T32

Q16	8-729-100-66	s 2SC1623 Ser.No 42081 ~
-----	--------------	-----------------------------

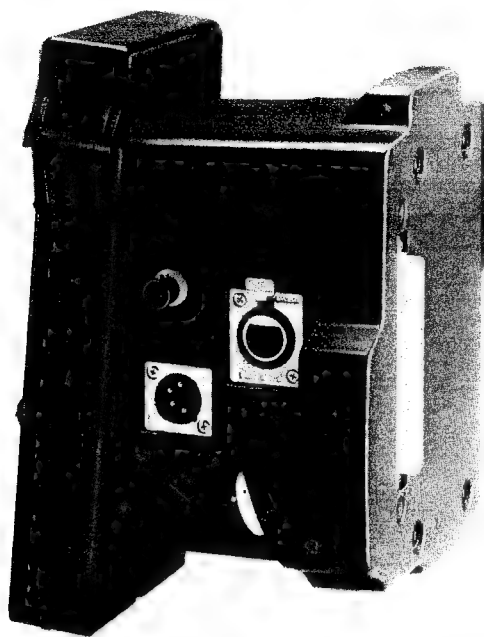
R2	1-216-655-11	s METAL, CHIP 1.5K 0.5% 1/10W (G,R)
R5	1-216-673-11	s METAL,CHIP 8.2K 0.5% 1/10W
R6	1-216-655-11	s METAL,CHIP 1.5K 0.5% 1/10W
R7	1-216-667-11	s METAL,CHIP 4.7K 0.5% 1/10W
R14	1-216-643-11	s METAL,CHIP 470 0.5% 1/10W
R21	1-216-663-11	s METAL,CHIP 3.3K 0.5% 1/10W
R32	1-216-691-11	s METAL,CHIP 47K 0.5% 1/10W
R34	1-216-691-11	s METAL,CHIP 47K 0.5% 1/10W
R43	1-259-877-00	s CARBON 1.2M 5% 1/4W (G,R)
	1-259-879-00	s CARBON 1.8M 5% 1/4W (B) Ser No. 42081 ~ 42850

SW-281 BOARD

1-627-915-11 o PRINTED CIRCUIT BOARD "SW-281"	
--	--

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
	1-564-026-00	s CONTACT, FEMALE, AWG24-30	CN1	1-563-684-11	o CONNECTOR, BOARD TO BOARD 11P
			CN2	1-563-685-11	o CONNECTOR, BOARD TO BOARD 12P
CN3	1-562-151-11	o HOUSING 6P	CN3	1-563-684-11	o CONNECTOR, BOARD TO BOARD 11P
			CN4	1-563-684-11	o CONNECTOR, BOARD TO BOARD 11P
S1	1-570-854-11	s SWITCH, SLIDE			
S2	1-570-854-11	s SWITCH, SLIDE			
			CP1	1-577-182-11	s OSCILLATOR, CRYSTAL
SW-282 BOARD			IC1	8-752-329-56	s CXD1155Q: SONY
	1-627-922-11	o PRINTED CIRCUIT BOARD "SW-282"	IC2	8-759-205-03	s TC74HC27F: TOSHIBA
			IC3	8-759-007-62	s MC74HC74F: MOTOROLA
			IC4	8-759-204-96	s TC74HC04F: TOSHIBA
			IC5	8-752-329-33	s CXD1251Q: SONY
			IC1	8-759-747-92	s MB7114LPF: FUJITSU
CN4	1-562-148-11	o HOUSING 3P	L1	1-408-783-00	s CHIP 33UH
CN8	1-562-147-11	o HOUSING, CONNECTOR 2P	L2	1-408-785-21	s CHIP 47UH
			L3	1-408-783-00	s CHIP 33UH
R1	1-249-401-11	s CARBON 47 5% 1/4W			
S1	1-553-739-21	s SWITCH, TACTILE	Q2	8-729-100-75	s 2SA812-M5
S2	1-553-739-21	s SWITCH, TACTILE			
S3	1-553-739-21	s SWITCH, TACTILE	R38	1-247-903-00	s CARBON 1M 5% 1/4W
SW001	1-554-486-00	s SWITCH, TOGGLE	FRAME		
				1-542-112-11	s MIC
				1-547-301-11	o FILTER UNIT, OPTICAL
				1-574-144-11	s WIRE, FLAT TYPE(12CORE)
				1-574-145-11	s WIRE, FLAT TYPE(30CORE)
TG-38 BOARD					
	A-7513-830-A	o MOUNTED CIRCUIT BOARD "TG-38"	CN101	1-561-781-21	s SOCKET, DIN 8P
	Ser.No 10001 ~ 10720	(UC)	CN102	1-565-653-11	s CONNECTOR SMALL TYPE 8P
	30001 ~ 30840	(J)	CN104	1-561-781-21	s SOCKET, DIN 8P
	40001 ~ 42530	(EK)	CN105	1-562-222-41	s RECEPTACLE, 6P FEMALE
	A-7513-998-A	o MOUNTED CIRCUIT BOARD "TG-38"			
	Ser.No 10721 ~	(UC)	SW102	1-553-972-00	s TOGGLE
	30841 ~	(J)			
	42531 ~	(EK)			
C4	1-135-125-21	s TANTALUM,CHIP 33uF 20% 10V			
C6	1-163-037-11	s CERAMIC,CHIP 0.022uF 5% 25V			
C7	1-135-125-21	s TANTALUM,CHIP 33uF 20% 10V			
C9	1-163-037-11	s CERAMIC,CHIP 0.022uF 5% 25V			
C10	1-135-124-21	s TANTALUM,CHIP 22uF 20% 10V			
C12	1-163-037-11	s CERAMIC,CHIP 0.022uF 5% 25V			
C13	1-131-374-00	s TANTALUM 33uF 10% 16V			
C21	1-135-124-21	s TANTALUM,CHIP 22uF 20% 10V			
C23	1-163-095-00	s CERAMIC, CHIP 12P 5% 50V			
C24	1-161-051-00	s CERAMIC 0.01 10% 25V			

CAMERA ADAPTOR



SPECIFICATIONS

Inputs/Outputs	VTR/CCU/CMA connector: Sony Q-type, 14-pin DC IN: XLR-type, Male 4-pin MIC IN: XLR-type, Female, 3-pin, balanced GEN LOCK: BNC-type, 75 ohms, unbalanced EARPHONE: mini jack INTERCOM: mini intercom jack
Power requirements	12 V DC
Weight	Approx. 960 g (2 lb 2 oz)
Dimensions	Approx. 129 × 197 × 148 mm (w/h/d) (5 ¹ / ₈ × 7 ⁷ / ₈ × 5 ⁷ / ₈ inches)
Supplied accessories	Screws for attaching the CA-325/325P M4 × 6 (2) M4 × 12 (2) Operating Instructions (1)

Design and specifications are subject to change without notice.

SONY[®]
SERVICE MANUAL

TABLE OF CONTENTS

A. BLOCK DIAGRAM

Overall A-1

B. SEMICONDUCTOR

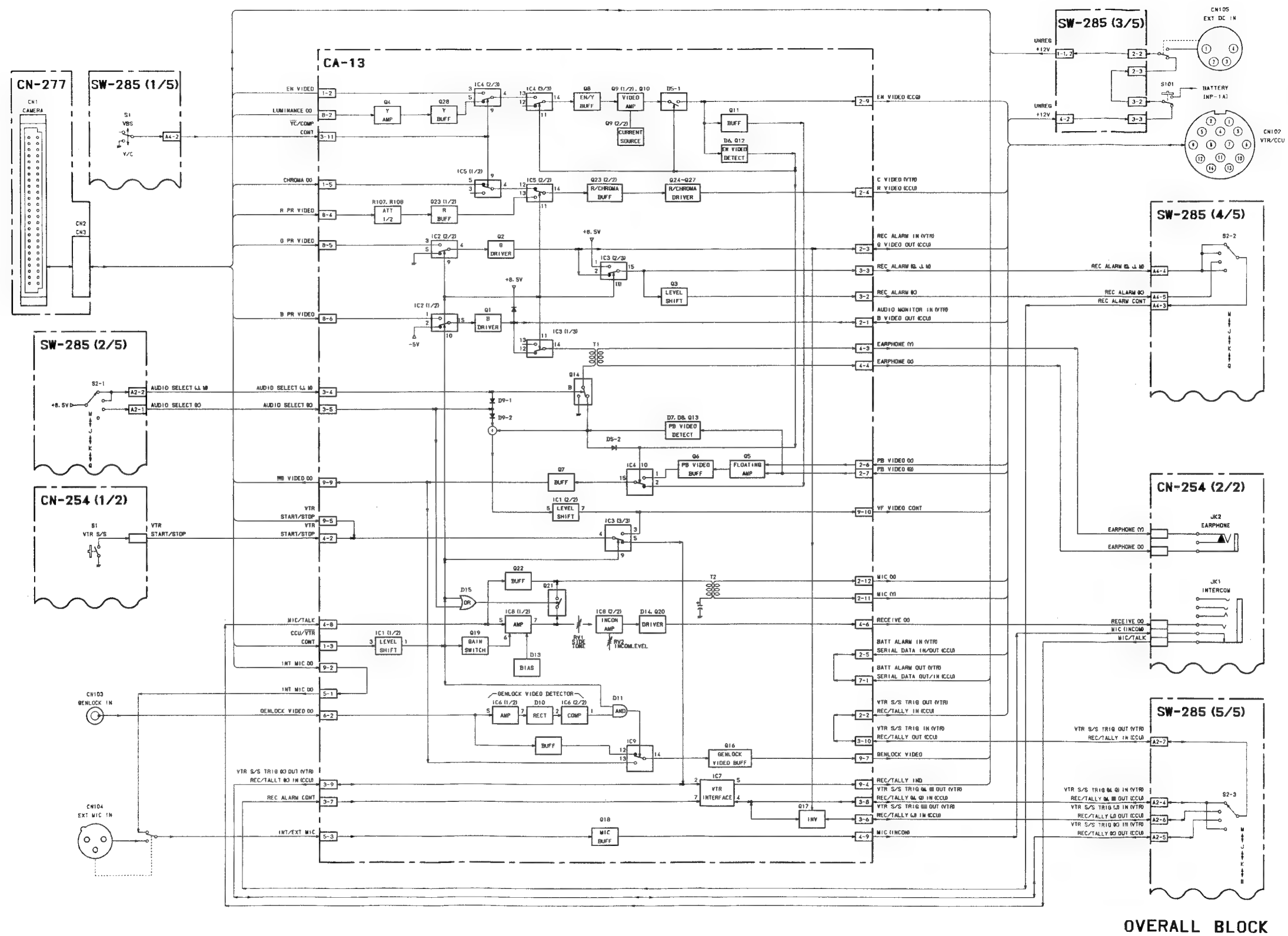
Semiconductor B-1

C. SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATION

CA-13	} C-4
CN-254		
CN-277		
CN-285		

D. SPARE PARTS

D-1. Parts Information D-1
D-2. Screws D-2
D-3. Exploded View D-5
D-4. Electrical Parts D-6

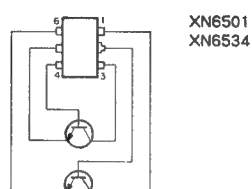
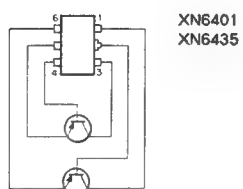
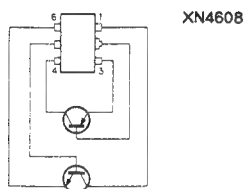
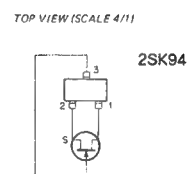
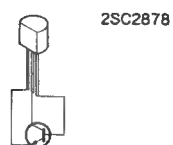
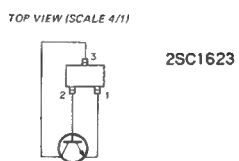
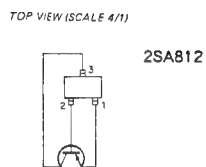
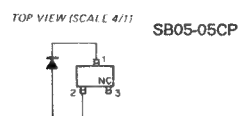
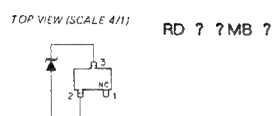
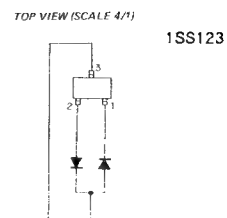
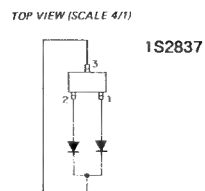
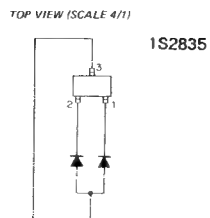
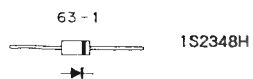
SECTION A
BLOCK DIAGRAM

OVERALL BLOCK

SECTION B SEMICONDUCTOR

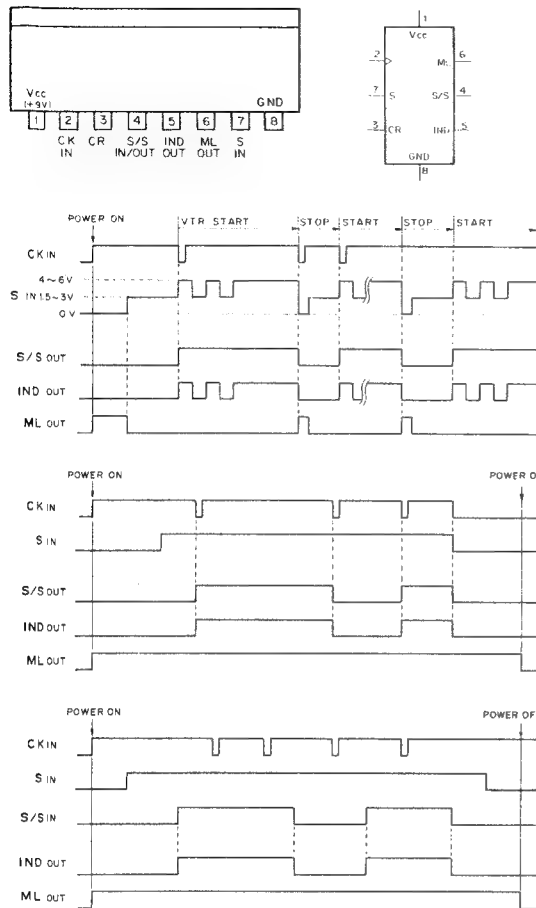
The circuit diagram of is obtained from the IC data book published by the manufacturer.

TYPE	PAGE
1S2348H.....	B-2
1S2835.....	B-2
1S2837.....	B-2
1SS123.....	B-2
2SA812.....	B-2
2SC1623.....	B-2
2SC2878.....	B-2
2SK94.....	B-2
CX518.....	B-3
NJM2043M-D.....	B-3
NJM2903M.....	B-3
RD??M-B?.....	B-2
SB05-05CP.....	B-2
TC4053BF.....	B-3
μ PC4558G2.....	B-3
XN4608.....	B-2
XN6401.....	B-2
XN6501.....	B-2
XN6534.....	B-2



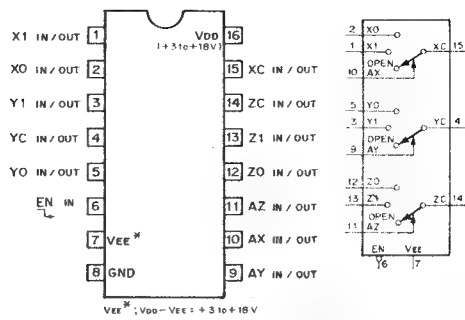
CX518 (SONY)

INTERFACE CIRCUIT BETWEEN VTR AND CAMERA
- SIDE VIEW -



TC4053BF (TOSHIBA) FLAT PACKAGE

C-MOS 2-CHANNEL MULTIPLEXER/DEMULTIPLEXER
- TOP VIEW -

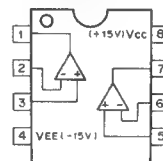


	CONT INPUTS		ON
	EN	A (X,Y,Z)	CHANNEL
0; LOW LEVEL	0	0	0
1; HIGH LEVEL	0	1	1
X; DON'T CARE.	1	X	OPEN

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

uPC4558G2 (NEC) FLAT PACKAGE

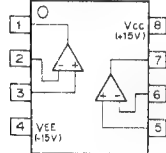
OPERATIONAL AMPLIFIER
- TOP VIEW -



NJM2043M-D (JRC) FLAT PACKAGE

RC2043MC (RAYTHEON) FLAT PACKAGE

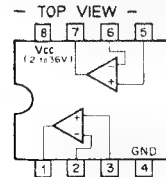
OPERATIONAL AMPLIFIER
- TOP VIEW -



NJM2903M (JRC) FLAT PACKAGE

LM2903M (RAYTHEON) FLAT PACKAGE

OPERATIONAL AMPLIFIER
- TOP VIEW -

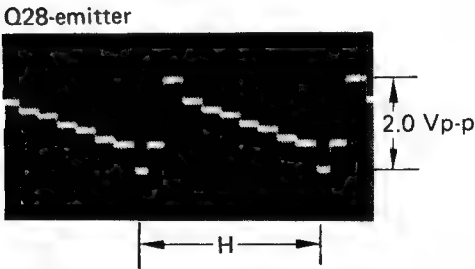
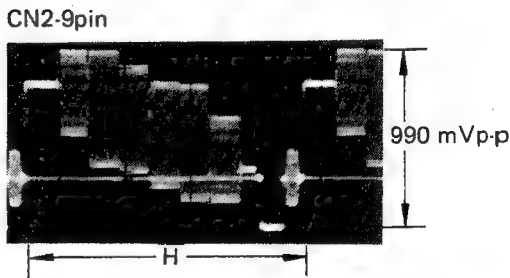
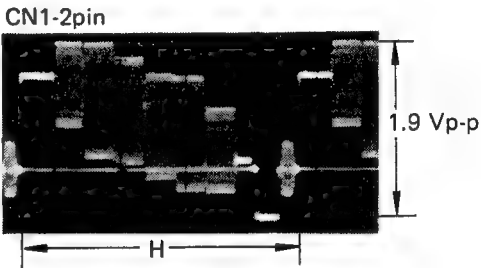
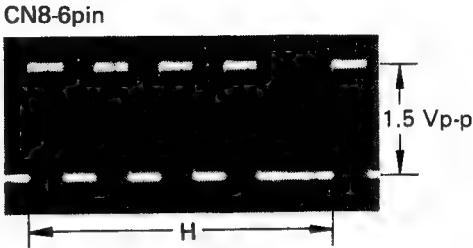
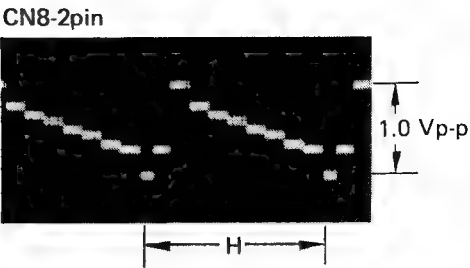
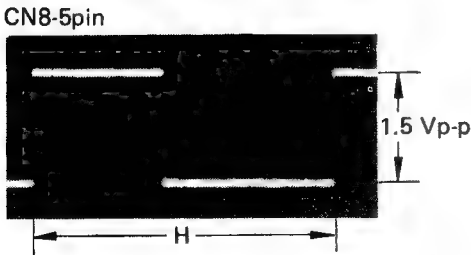
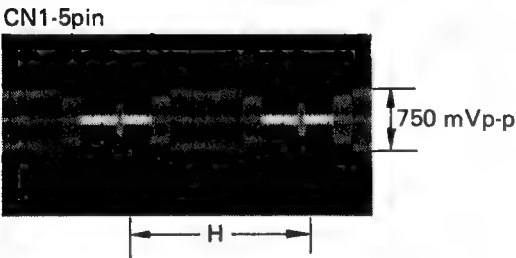
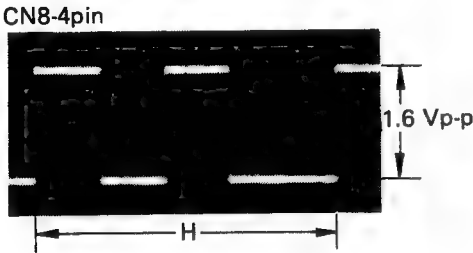


CA-325(J, UC)
CA-325P(EK)

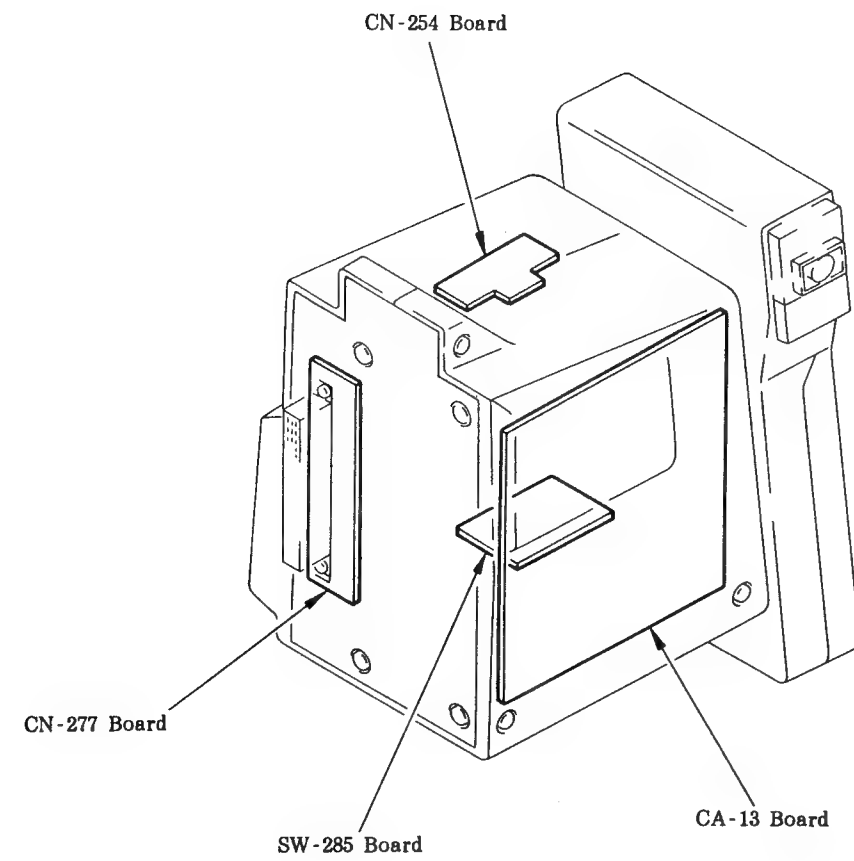
CA-13

NOTE:

1. All voltage are dc, measured with a digital voltmeter. (input impedance: 10MΩ)
2. All waveforms are taken and DC voltage is measured in condition below.
- . Set camera BARS/WB selector to BARS position.
- . Set camera OUTPUT selector to VBS position.



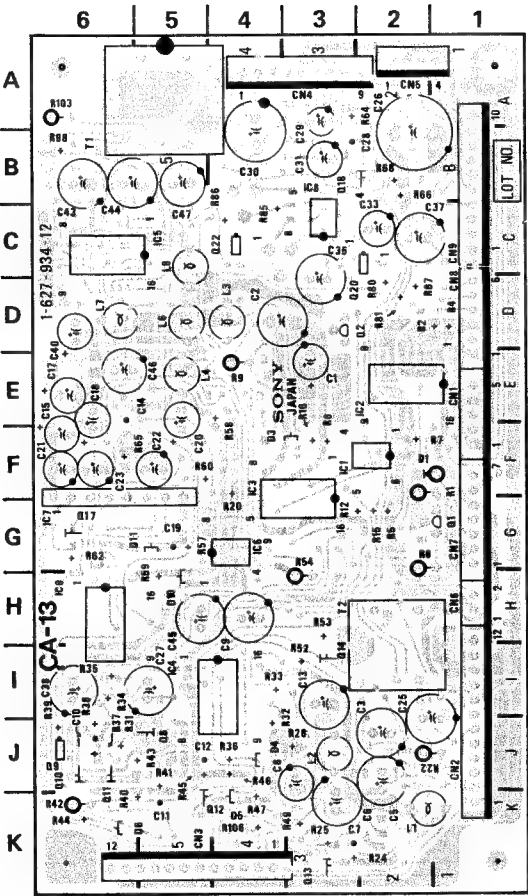
SECTION C
SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS



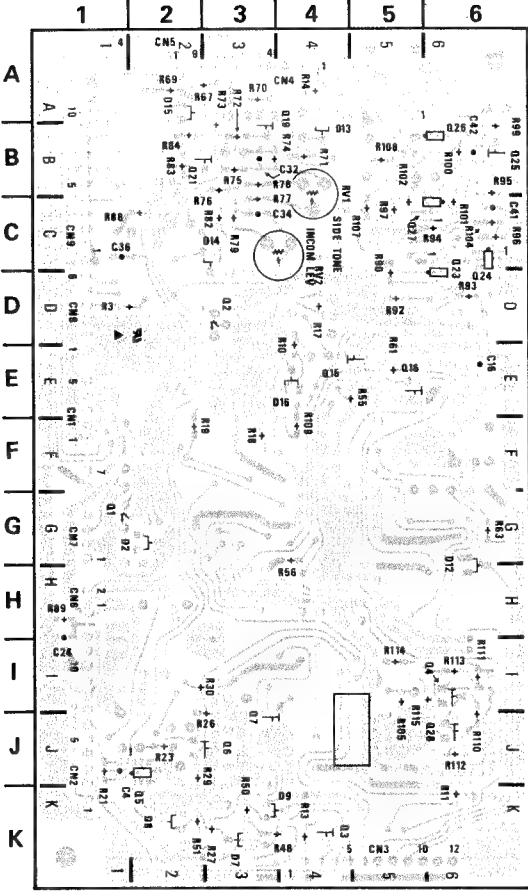
CA-13 BOARD
Ser.No.10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)

CA-13 (1-627-934-11,12)

- | | |
|-----|-----|
| CN1 | E-1 |
| CN2 | K-1 |
| CN3 | K-5 |
| CN4 | A-3 |
| CN5 | A-2 |
| CN6 | H-1 |
| CN7 | G-1 |
| CN8 | D-1 |
| CN9 | B-1 |
| | |
| D1 | F-2 |
| D2 | G-2 |
| D3 | F-3 |
| D4 | J-4 |
| D5 | K-4 |
| D6 | K-5 |
| D7 | K-3 |
| D8 | K-2 |
| D9 | K-3 |
| D10 | H-5 |
| D11 | G-5 |
| D12 | H-6 |
| D13 | B-4 |
| D14 | C-3 |
| D15 | A-2 |
| D16 | E-4 |
| | |
| IC1 | F-2 |
| IC2 | E-2 |
| IC3 | G-3 |
| IC4 | I-4 |
| IC5 | C-6 |
| IC6 | G-4 |
| IC7 | F-6 |
| IC8 | C-3 |
| IC9 | H-6 |
| | |
| Q1 | G-1 |
| Q2 | D-3 |
| Q3 | K-4 |
| Q4 | I-6 |
| Q5 | J-2 |
| Q6 | J-3 |
| Q7 | J-3 |
| Q8 | J-5 |
| Q9 | J-6 |
| Q10 | J-6 |
| Q11 | J-6 |
| Q12 | K-5 |
| Q13 | K-3 |
| Q14 | I-3 |
| Q15 | E-5 |
| Q16 | E-5 |
| Q17 | G-6 |
| Q18 | B-3 |
| Q19 | B-3 |
| Q20 | C-2 |
| Q21 | B-3 |
| Q22 | C-4 |
| Q23 | D-6 |
| Q24 | C-6 |
| Q25 | B-6 |
| Q26 | B-6 |
| Q27 | C-6 |
| Q28 | J-6 |
| | |
| T1 | B-6 |
| T2 | H-3 |



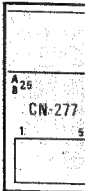
C-4 (a)



C-5 (a)

CA-13 (1-627-934-11,12)

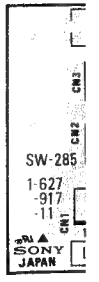
- | | |
|-----|-----|
| CN1 | E-1 |
| CN2 | K-1 |
| CN3 | K-5 |
| CN4 | A-3 |
| CN5 | A-2 |
| CN6 | H-1 |
| CN7 | G-1 |
| CN8 | D-1 |
| CN9 | B-1 |
| | |
| D1 | F-2 |
| D2 | G-2 |
| D3 | F-3 |
| D4 | J-4 |
| D5 | K-4 |
| D6 | K-5 |
| D7 | K-3 |
| D8 | K-2 |
| D9 | K-3 |
| D10 | H-5 |
| D11 | G-5 |
| D12 | H-6 |
| D13 | B-4 |
| D14 | C-3 |
| D15 | A-2 |
| D16 | E-4 |
| | |
| IC1 | F-2 |
| IC2 | E-2 |
| IC3 | G-3 |
| IC4 | I-4 |
| IC5 | C-6 |
| IC6 | G-4 |
| IC7 | F-6 |
| IC8 | C-3 |
| IC9 | H-6 |
| | |
| Q1 | G-1 |
| Q2 | D-3 |
| Q3 | K-4 |
| Q4 | I-6 |
| Q5 | J-2 |
| Q6 | J-3 |
| Q7 | J-3 |
| Q8 | J-5 |
| Q9 | J-6 |
| Q10 | J-6 |
| Q11 | J-6 |
| Q12 | K-5 |
| Q13 | K-3 |
| Q14 | I-3 |
| Q15 | E-5 |
| Q16 | E-5 |
| Q17 | G-6 |
| Q18 | B-3 |
| Q19 | B-3 |
| Q20 | C-2 |
| Q21 | B-3 |
| Q22 | C-4 |
| Q23 | D-6 |
| Q24 | C-6 |
| Q25 | B-6 |
| Q26 | B-6 |
| Q27 | C-6 |
| Q28 | J-6 |
| | |
| T1 | B-6 |
| T2 | H-3 |



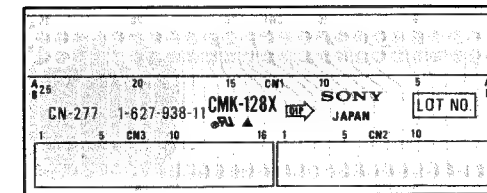
CN-25



SW-28



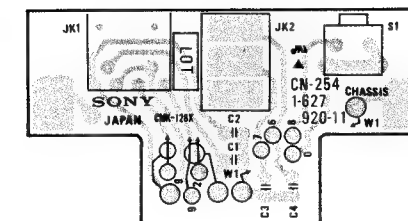
CN-277 BOARD



1-627-938-11 COMPONENT SIDE

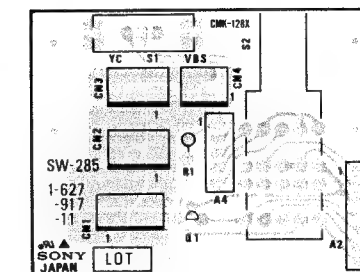
CN-254 BOARD

Ser. No. 10001-11270 (UC)
30001-30810 (J)
40001-42080 (EK)



1-627-920-11 COMPONENT SIDE

SW-285 BOARD



1-627-917-11 COMPONENT SIDE

CA-13 (1-627-934-11,12)

CN1 E-1
CN2 K-1
CN3 K-5
CN4 A-3
CN5 A-2
CN6 H-1
CN7 G-1
CN8 D-1
CN9 B-1

D1 F-2
D2 G-2
D3 F-3
D4 J-4
D5 K-4
D6 K-5
D7 K-3
D8 K-2
D9 K-3
D10 H-5
D11 G-5
D12 H-6
D13 B-4
D14 C-3
D15 A-2
D16 E-4

IC1 F-2
IC2 E-2
IC3 G-3
IC4 I-4
IC5 C-6
IC6 G-4
IC7 F-6
IC8 C-3
IC9 H-6

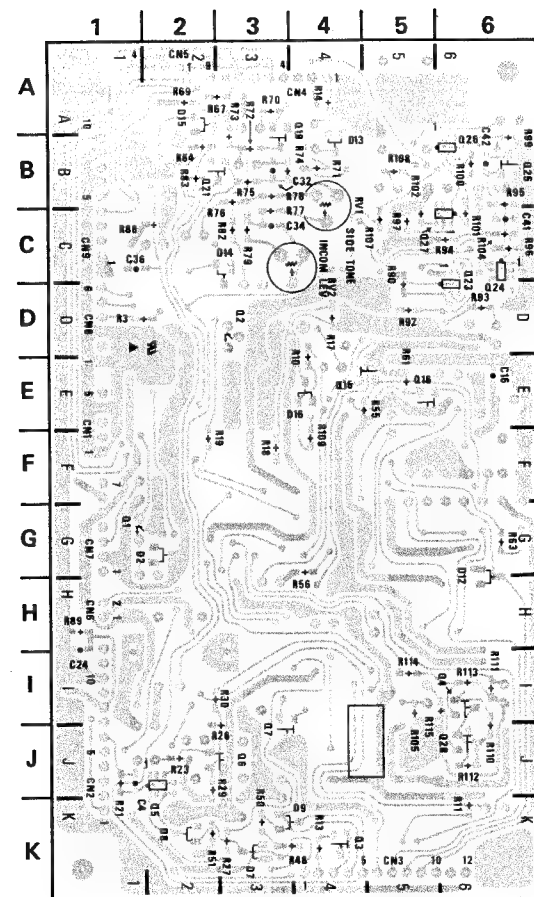
Q1 G-1
Q2 D-3
Q3 K-4
Q4 I-6
Q5 J-2
Q6 J-3
Q7 J-3
Q8 J-5
Q9 J-6
Q10 J-6
Q11 J-6
Q12 K-5
Q13 K-3
Q14 I-3
Q15 E-5
Q16 E-5
Q17 G-6
Q18 B-3
Q19 B-3
Q20 C-2
Q21 B-3
Q22 C-4
Q23 D-6
Q24 C-6
Q25 B-6
Q26 B-6
Q27 C-6
Q28 J-6

T1 B-6
T2 H-3

C-5 (a)

C-6 (a)

CA-325 (J, UC)
CA-325P (EK)

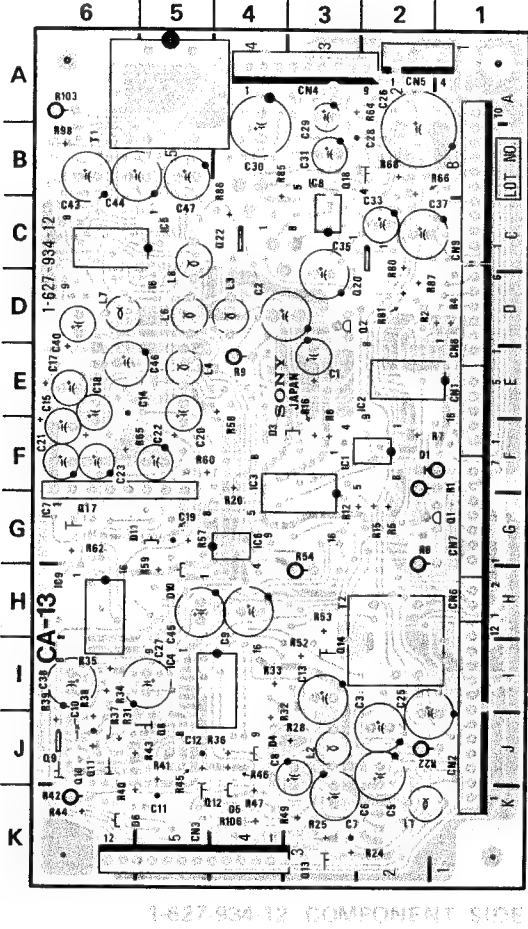


1-627-934-11 SOLDERING SIDE

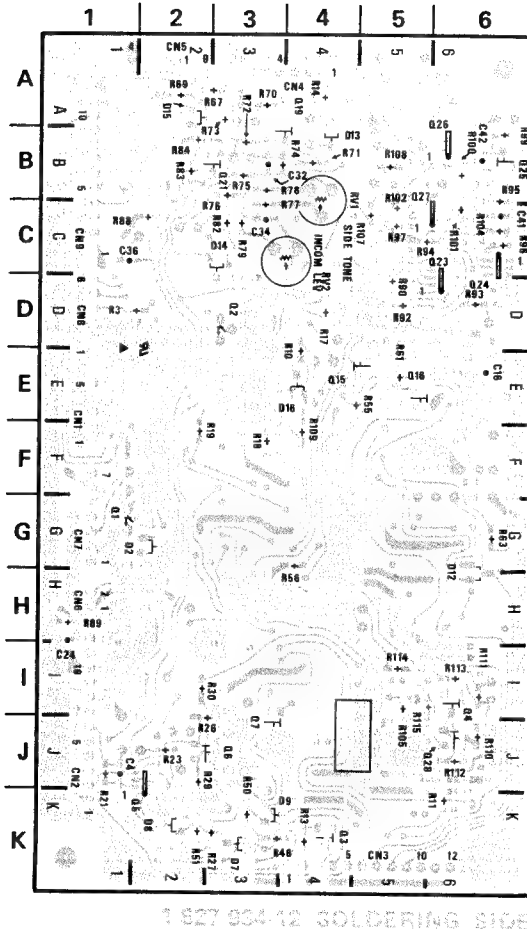
CA-13 BOARD
Ser. No. 11271- (UC)
30811- (J)
42081- (EK)

CA-13 (1-627-934-11,12)

- | | |
|-----|-----|
| CN1 | E-1 |
| CN2 | K-1 |
| CN3 | K-5 |
| CN4 | A-3 |
| CN5 | A-2 |
| CN6 | H-1 |
| CN7 | G-1 |
| CN8 | D-1 |
| CN9 | B-1 |
| | |
| D1 | F-2 |
| D2 | G-2 |
| D3 | F-3 |
| D4 | J-4 |
| D5 | K-4 |
| D6 | K-5 |
| D7 | K-3 |
| D8 | K-2 |
| D9 | K-3 |
| D10 | H-5 |
| D11 | G-5 |
| D12 | H-6 |
| D13 | B-4 |
| D14 | C-3 |
| D15 | A-2 |
| D16 | E-4 |
| | |
| IC1 | F-2 |
| IC2 | E-2 |
| IC3 | G-3 |
| IC4 | I-4 |
| IC5 | C-6 |
| IC6 | G-4 |
| IC7 | F-6 |
| IC8 | C-3 |
| IC9 | H-6 |
| | |
| Q1 | G-1 |
| Q2 | D-3 |
| Q3 | K-4 |
| Q4 | I-6 |
| Q5 | J-2 |
| Q6 | J-3 |
| Q7 | J-3 |
| Q8 | J-5 |
| Q9 | J-6 |
| Q10 | J-6 |
| Q11 | J-6 |
| Q12 | K-5 |
| Q13 | K-3 |
| Q14 | I-3 |
| Q15 | E-5 |
| Q16 | E-5 |
| Q17 | G-6 |
| Q18 | B-3 |
| Q19 | B-3 |
| Q20 | C-2 |
| Q21 | B-3 |
| Q22 | C-4 |
| Q23 | D-6 |
| Q24 | C-6 |
| Q25 | B-6 |
| Q26 | B-6 |
| Q27 | C-6 |
| Q28 | J-6 |
| | |
| T1 | B-6 |
| T2 | H-3 |



C-4 (b)

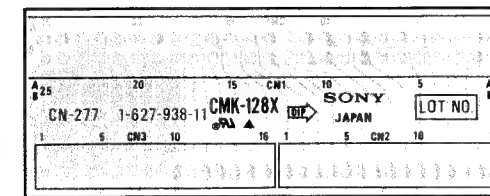


C-5 (b)

CA-13 (1-627-934-11,12)

- | | |
|-----|-----|
| CN1 | E-1 |
| CN2 | K-1 |
| CN3 | K-5 |
| CN4 | A-3 |
| CN5 | A-2 |
| CN6 | H-1 |
| CN7 | G-1 |
| CN8 | D-1 |
| CN9 | B-1 |
| | |
| D1 | F-2 |
| D2 | G-2 |
| D3 | F-3 |
| D4 | J-4 |
| D5 | K-4 |
| D6 | K-5 |
| D7 | K-3 |
| D8 | K-2 |
| D9 | K-3 |
| D10 | H-5 |
| D11 | G-5 |
| D12 | H-6 |
| D13 | B-4 |
| D14 | C-3 |
| D15 | A-2 |
| D16 | E-4 |
| | |
| IC1 | F-2 |
| IC2 | E-2 |
| IC3 | G-3 |
| IC4 | I-4 |
| IC5 | C-6 |
| IC6 | G-4 |
| IC7 | F-6 |
| IC8 | C-3 |
| IC9 | H-6 |
| | |
| Q1 | G-1 |
| Q2 | D-3 |
| Q3 | K-4 |
| Q4 | I-6 |
| Q5 | J-2 |
| Q6 | J-3 |
| Q7 | J-3 |
| Q8 | J-5 |
| Q9 | J-6 |
| Q10 | J-6 |
| Q11 | J-6 |
| Q12 | K-5 |
| Q13 | K-3 |
| Q14 | I-3 |
| Q15 | E-5 |
| Q16 | E-5 |
| Q17 | G-6 |
| Q18 | B-3 |
| Q19 | B-3 |
| Q20 | C-2 |
| Q21 | B-3 |
| Q22 | C-4 |
| Q23 | D-6 |
| Q24 | C-6 |
| Q25 | B-6 |
| Q26 | B-6 |
| Q27 | C-6 |
| Q28 | J-6 |
| | |
| T1 | B-6 |
| T2 | H-3 |

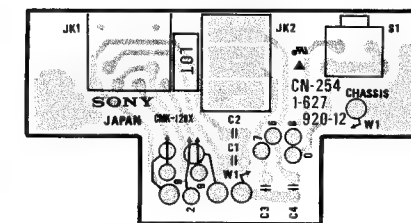
CN-277 BOARD



1-627-938-11 COMPONENT SIDE

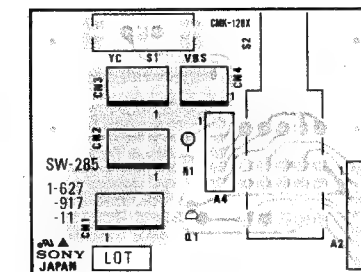
CN-254 BOARD

Ser. No. 11271-	(UC)
30811-	(J)
42081-	(EK)



1-627-920-12 COMPONENT SIDE

SW-285 BOARD



1-627-917-11 COMPONENT SIDE

CA-13 (1-627-934-11,12)

CN1	E-1
CN2	K-1
CN3	K-5
CN4	A-3
CN5	A-2
CN6	H-1
CN7	G-1
CN8	D-1
CN9	B-1

D1	F-2
D2	G-2
D3	F-3
D4	J-4
D5	K-4
D6	K-5
D7	K-3
D8	K-2
D9	K-3
D10	H-5
D11	G-5
D12	H-6
D13	B-4
D14	C-3
D15	A-2
D16	E-4

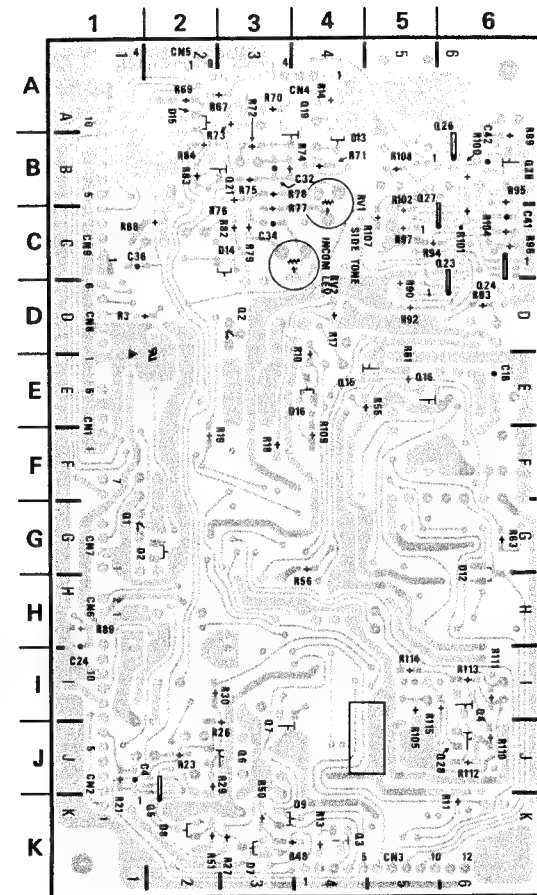
IC1	F-2
IC2	E-2
IC3	G-3
IC4	I-4
IC5	C-6
IC6	G-4
IC7	F-6
IC8	C-3
IC9	H-6

Q1	G-1
Q2	D-3
Q3	K-4
Q4	I-6
Q5	J-2
Q6	J-3
Q7	J-3
Q8	J-5
Q9	J-6
Q10	J-6
Q11	J-6
Q12	K-5
Q13	K-3
Q14	I-3
Q15	E-5
Q16	E-5
Q17	G-6
Q18	B-3
Q19	B-3
Q20	C-2
Q21	B-3
Q22	C-4
Q23	D-6
Q24	C-6
Q25	B-6
Q26	B-6
Q27	C-6
Q28	J-6

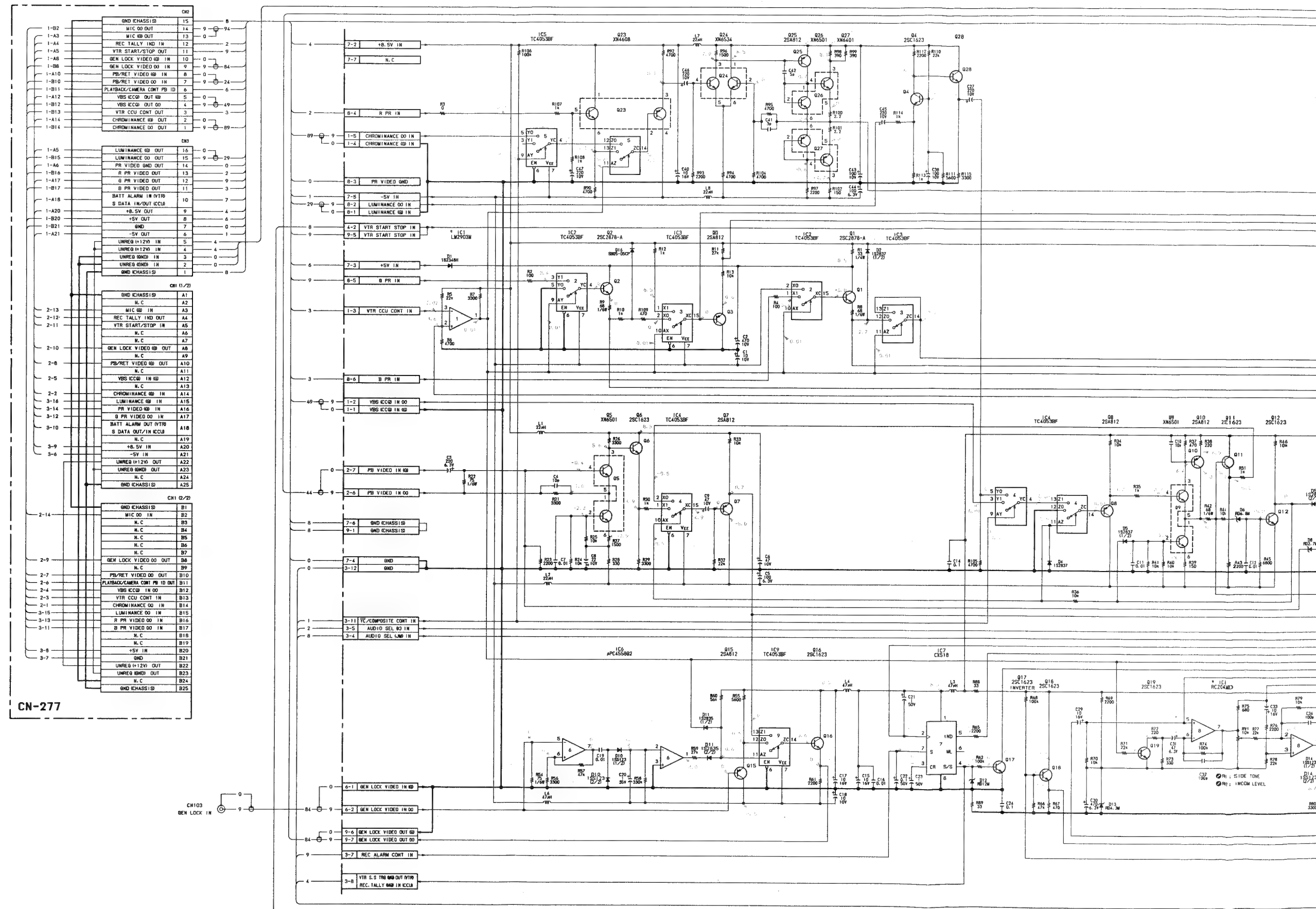
T1	B-6
T2	H-3

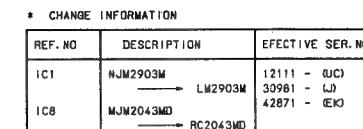
C-5 (b)

C-6 (b)

CA-325 (J, UC)
CA-325P (EK)

1-627-934-12 SOLDERING SIDE





No.	Parts No.	SP	Description
1	A-6703-651-E	s	CASE ASSY, BATTERY
2	A-7513-826-A	o	MOUNTED CIRCUIT BOARD "CA-13"
3	X-3664-208-1	s	KNOB ASSY, FADE
4	X-3717-701-4	o	COVER ASSY, TOP, BATTERY
6	1-507-578-12	s	JACK "EAR"
7	1-507-883-11	s	JACK, SMALL TYPE 4P "INTERCOM"
8	1-508-942-12	s	RECEPTACLE, 14P MALE "VTR/CCU/CMA"
9	1-552-665-11	s	SWITCH, MICRO
10	1-554-088-41	s	SWITCH, KEY BOARD "VTR START"
11	1-561-781-41	s	RECEPTACLE, BNC "GEN LOCK"
12	1-563-096-11	s	RECEPTACLE, 3P FEMALE (WITH SW) "MIC IN"
13	1-564-603-11	s	RECEPTACLE, 4P MALE (WITH DC SW) "DC IN"
14	1-566-581-11	o	RECEPTACLE, 50P, FEMALE
15	1-570-491-11	s	SWITCH, ROTARY "VTR"
16	1-627-917-11	o	PRINTED CIRCUIT BOARD "SW-285"
17	1-627-920-11	o	PRINTED CIRCUIT BOARD "CN-254"
18	1-627-938-11	o	PRINTED CIRCUIT BOARD "CN-277"
19	1-571-767-11	s	SWITCH, SLIDE "OUTPUT"
21	2-122-068-01	o	PANEL, CA FRONT
22	2-122-073-01	o	PANEL, CN
23	2-122-075-01	s	COVER (LEFT)
24	2-122-076-01	s	COVER (RIGHT)
25	2-132-225-01	o	PLATE (CCQ), BLIND
26	2-132-226-01	o	PLATE (MIC), BLIND
27	3-676-244-03	s	COVER, SWITCH
28	3-680-604-11	o	PLATE, BLIND
29	3-703-075-01	s	CAP 2, SHAFT
30	3-717-707-02	o	CUSHION (2)
31	3-717-708-01	o	RETAINER, CASE
32	3-717-709-01	o	SHAFT, LID
33	3-718-040-02	o	COVER (1), BATTERY CASE
34	3-718-172-01	o	RETAINER, HOOK

D-4. ELECTRICAL PARTS

Ref. No.	Part No.	SP Description	Ref. No.	Part No.	SP Description
CA-13 BOARD			CN1	1-506-470-11	o CONNECTOR, 5P, MALE
A-7513-826-A o MOUNTED CIRCUIT BOARD			CN2	1-506-477-11	o CONNECTOR, 12P, MALE
"CA-13"				1-562-157-11	o PLUG HOUSING, 12P
				1-564-026-00	o PLUG CONTACT
			CN3	1-506-477-11	o CONNECTOR, 12P, MALE
			CN4	1-506-474-11	o CONNECTOR, 9P, MALE
			CN5	1-506-469-11	o CONNECTOR, 4P, MALE
				1-562-149-11	o PLUG HOUSING, 4P
				1-564-026-00	o PLUG CONTACT
C1	1-131-377-00	s TANTALUM 10uF 10% 10V	CN6	1-506-467-11	o CONNECTOR, 2P, MALE
C2	1-124-472-11	s ELECT 470uF 20% 10V		1-562-147-11	o PLUG HOUSING, 2P
C3	1-126-176-11	s ELECT 220uF 20% 10V		1-564-026-00	o PLUG CONTACT
C4	1-163-093-00	s CERAMIC, CHIP 10PF 5% 50V			
C5	1-124-225-00	s ELECT 100uF 20% 6.3V	CN7	1-506-472-11	o CONNECTOR, 7P, MALE
C6	1-124-589-11	s ELECT 47uF 20% 16V	CN8	1-506-471-11	o CONNECTOR, 6P, MALE
C7	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	CN9	1-506-475-11	o CONNECTOR, 10P, MALE
C8	1-124-638-11	s ELECT 22uF 20% 10V			
C9	1-124-589-11	s ELECT 47uF 20% 16V			
C10	1-163-093-00	s CERAMIC, CHIP 10PF 5% 50V			
C11	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	D1	8-719-923-48	s 1S2348H
C12	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	D2	8-719-100-05	s 1S2837
C13	1-124-225-00	s ELECT 100uF 20% 6.3V	D3	8-719-100-03	s 1S2835
C14	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V	D4	8-719-100-05	s 1S2837
C15	1-131-365-00	s TANTALUM 10uF 10% 20V	D5	8-719-100-05	s 1S2837
C16	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	D6	8-719-106-16	s RD6.8M-B1
C17	1-131-365-00	s TANTALUM 10uF 10% 20V	D7	8-719-100-03	s 1S2835
C18	1-131-377-00	s TANTALUM 10uF 10% 10V	D8	8-719-105-32	s RD2.7M-B2
C19	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V	D9	8-719-101-23	s 1SS123
C20	1-131-347-00	s TANTALUM 1uF 10% 35V	D10	8-719-101-23	s 1SS123
C21	1-124-438-00	s ELECT 1MF 20% 50V	D11	8-719-100-03	s 1S2835
C22	1-124-463-00	s ELECT 0.1uF 20% 50V	D12	8-719-106-70	s RD12M-B1
C23	1-124-438-00	s ELECT 1MF 20% 50V	D13	8-719-105-63	s RD4.3M-B1
C24	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V	D14	8-719-101-23	s 1SS123
C25	1-124-225-00	s ELECT 100uF 20% 6.3V	D15	8-719-100-05	s 1S2837
			D16	8-719-938-75	s SB05-05CP
C26	1-124-473-11	s ELECT 1000uF 20% 10V			
C27	1-126-176-11	s ELECT 220uF 20% 10V	IC1	8-759-981-66	s LM2903M: RAYTHEON
C28	1-163-036-00	s CERAMIC, CHIP 0.068MF 50V	IC2	8-759-208-11	s TC4053BFHB: TOSHIBA
C29	1-126-157-11	s ELECT 10uF 20% 16V	IC3	8-759-208-11	s TC4053BFHB: TOSHIBA
C30	1-124-472-11	s ELECT 470uF 20% 10V	IC4	8-759-208-11	s TC4053BFHB: TOSHIBA
			IC5	8-759-208-11	s TC4053BFHB: TOSHIBA
C31	1-126-154-11	s ELECT 47uF 20% 6.3V			
C32	1-163-117-00	s CERAMIC, CHIP 100PF 5% 50V	IC6	8-759-103-36	s UPC4558G2: NEC
C33	1-126-157-11	s ELECT 10uF 20% 16V	IC7	8-759-605-18	s CX518: SONY
C34	1-163-117-00	s CERAMIC, CHIP 100PF 5% 50V	IC8	8-759-981-59	s RC2043MD: RAYTHEON
C35	1-124-225-00	s ELECT 100uF 20% 6.3V	IC9	8-759-208-11	s TC4053BFHB: TOSHIBA
C36	1-163-021-00	s CERAMIC, CHIP 0.01uF 5% 50V			
C37	1-124-584-00	s ELECT 100uF 20% 10V	L1	1-408-413-00	s 22uH
C38	1-124-584-00	s ELECT 100uF 20% 10V	L2	1-408-413-00	s 22uH
C40	1-131-365-00	s TANTALUM 10uF 10% 20V	L3	1-410-478-11	s 47uH
C41	1-163-086-00	s CERAMIC, CHIP 3PF 50V	L4	1-410-478-11	s 47uH
			L6	1-410-478-11	s 47uH
C42	1-163-088-00	s CERAMIC, CHIP 5PF 50V			
C43	1-124-584-00	s ELECT 100uF 20% 10V	L7	1-408-413-00	s 22uH
C44	1-124-225-00	s ELECT 100uF 20% 6.3V	L8	1-408-413-00	s 22uH
C45	1-126-176-11	s ELECT 220uF 20% 10V			
C46	1-126-176-11	s ELECT 220uF 20% 10V			
C47	1-126-176-11	s ELECT 220uF 20% 10V			

Ref. No. Part No. SP Description

Q1 8-729-201-04 s 2SC2878-A
Q2 8-729-201-04 s 2SC2878-A
Q3 8-729-100-75 s 2SA812-M5
Q4 8-729-100-66 s 2SC1623-L6
Q5 8-729-402-19 s XN6501

Q6 8-729-100-66 s 2SC1623-L6
Q7 8-729-100-75 s 2SA812-M5
Q8 8-729-100-75 s 2SA812-M5
Q9 8-729-402-19 s XN6501
Q10 8-729-100-75 s 2SA812-M5

Q11 8-729-100-66 s 2SC1623-L6
Q12 8-729-100-66 s 2SC1623-L6
Q13 8-729-100-66 s 2SC1623-L6
Q14 8-729-100-66 s 2SC1623-L6
Q15 8-729-100-75 s 2SA812-M5

Q16 8-729-100-66 s 2SC1623-L6
Q17 8-729-100-66 s 2SC1623-L6
Q18 8-729-100-66 s 2SC1623-L6
Q19 8-729-100-66 s 2SC1623-L6
Q20 8-729-402-16 s XN4608

Q21 8-729-109-41 s 2SK94-X1
Q22 8-729-402-19 s XN6501
Q23 8-729-402-16 s XN4608
Q24 8-729-403-34 s XN6534
Q25 8-729-100-75 s 2SA812-M5

Q26 8-729-402-19 s XN6501
Q27 8-729-402-78 s XN6401
Q28 8-729-100-66 s 2SC1623-L6

R1 1-249-399-11 s CARBON 33 5% 1/4W
R2 1-216-025-00 s METAL, CHIP 100 5% 1/10W
R3 1-216-295-00 s METAL, CHIP 0-OHM 1/10W
R4 1-216-025-00 s METAL, CHIP 100 5% 1/10W
R5 1-216-081-00 s METAL, CHIP 22K 5% 1/10W

R6 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
R7 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
R8 1-215-393-00 s METAL 68 1% 1/6W
R9 1-215-393-00 s METAL 68 1% 1/6W
R10 1-216-049-00 s METAL, CHIP 1K 5% 1/10W

R11 1-216-083-00 s METAL, CHIP 27K 5% 1/10W
R12 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R13 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R14 1-216-017-00 s METAL, CHIP 47 5% 1/10W
R15 1-216-081-00 s METAL, CHIP 22K 5% 1/10W

Ref. No. Part No. SP Description

R16 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R17 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
R18 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R19 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
R20 1-216-049-00 s METAL, CHIP 1K 5% 1/10W

R21 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
R22 1-215-394-00 s METAL 75 1% 1/6W
R23 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R24 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R25 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R26 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
R27 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W
R28 1-216-037-00 s METAL, CHIP 330 5% 1/10W
R29 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
R30 1-216-049-00 s METAL, CHIP 1K 5% 1/10W

R31 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R32 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
R33 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R34 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R35 1-216-049-00 s METAL, CHIP 1K 5% 1/10W

R36 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R37 1-216-041-00 s METAL, CHIP 470 5% 1/10W
R38 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R39 1-216-029-00 s METAL, CHIP 150 5% 1/10W
R40 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R41 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R42 1-215-393-00 s METAL 68 1% 1/6W
R43 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R44 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R45 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W

R46 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R47 1-216-059-00 s METAL, CHIP 2.7K 5% 1/10W
R48 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R49 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
R50 1-216-075-00 s METAL, CHIP 12K 5% 1/10W

R51 1-216-105-00 s METAL, CHIP 220K 5% 1/10W
R52 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
R53 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
R54 1-215-394-00 s METAL 75 1% 1/6W
R55 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R56 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
R57 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
R58 1-216-109-00 s METAL, CHIP 330K 5% 1/10W
R59 1-216-083-00 s METAL, CHIP 27K 5% 1/10W
R60 1-216-091-00 s METAL, CHIP 56K 5% 1/10W

R61 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R62 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
R63 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
R64 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R65 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W

Ref. No. Part No. SP Description

R66 1-216-089-00 s METAL, CHIP 47K 5% 1/10W
R67 1-216-041-00 s METAL, CHIP 470 5% 1/10W
R68 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
R69 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R70 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R71 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
R72 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R73 1-216-037-00 s METAL, CHIP 330 5% 1/10W
R74 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
R75 1-216-045-00 s METAL, CHIP 680 5% 1/10W

R76 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R77 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
R78 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
R79 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R80 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W

R81 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R82 1-216-005-00 s METAL, CHIP 15 5% 1/10W
R83 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
R84 1-216-121-00 s METAL, CHIP 1M 5% 1/10W
R85 1-216-025-00 s METAL, CHIP 100 5% 1/10W

R86 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
R87 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
R88 1-216-013-00 s METAL, CHIP 33 5% 1/10W
R89 1-216-013-00 s METAL, CHIP 33 5% 1/10W
R90 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W

R92 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
R93 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R94 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
R95 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W

R96 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W

R97 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R98 1-216-039-00 s METAL, CHIP 390 5% 1/10W
R99 1-216-039-00 s METAL, CHIP 390 5% 1/10W
R100 1-216-298-00 s METAL, CHIP 2.2 5% 1/10W
R101 1-216-298-00 s METAL, CHIP 2.2 5% 1/10W

R102 1-216-029-00 s METAL, CHIP 150 5% 1/10W
R103 1-215-394-00 s METAL 75 1% 1/6W
R104 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W

R105 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
R106 1-216-097-00 s METAL, CHIP 100K 5% 1/10W

R107 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R108 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R109 1-216-041-00 s METAL, CHIP 470 5% 1/10W
R110 1-216-081-00 s METAL, CHIP 22K 5% 1/10W
R111 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R112 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R113 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R114 1-216-049-00 s METAL, CHIP 1K 5% 1/10W
R115 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W

Ref. No. Part No. SP Description

RV1 1-226-703-11 s METAL 10K
RV2 1-226-775-11 s METAL 100K

T1 1-427-270-XX s TRANSFORMER, OUTPUT
T2 1-427-487-00 s TRANSFORMER, OUTPUT

CN-254 BOARD

1-627-920-11 o PRINTED CIRCUIT BOARD
"CN-254"

1-564-026-00 s CONTACT, FEMALE, AWG24-30

C1 1-161-051-00 s CERAMIC 0.01uF 10% 50V
C2 1-161-051-00 s CERAMIC 0.01uF 10% 50V
C3 1-161-051-00 s CERAMIC 0.01uF 10% 50V
C4 1-161-051-00 s CERAMIC 0.01uF 10% 50V

CN4 1-562-154-11 o HOUSING 9P

JK1 1-507-883-00 s JACK, SMALL TYPE 4P
JK2 1-566-740-11 s JACK

S1 1-554-088-00 s SWITCH, TACTILE

CN-277 BOARD

1-627-938-11 o PRINTED CIRCUIT BOARD
"CN-277"

1-564-026-00 s CONTACT, FEMALE, AWG24-30

CN1 1-562-150-11 o HOUSING 5P
CN1 1-566-581-11 o RECEPTACLE, MULTI CONNECTOR 50P

CN5 1-562-149-11 o HOUSING 4P
CN7 1-562-152-11 o HOUSING, CONNECTOR 7P
CN8 1-562-151-11 o HOUSING 6P
CN9 1-562-155-11 o PLUG HOUSING, 10P

Ref. No. Part No. SP Description

SW-285 BOARD

1-627-917-11 o PRINTED CIRCUIT BOARD
"SW-285"

1-562-738-11 o HOUSING, CONNECTOR 5P
1-564-026-00 s CONTACT, FEMALE, AWG24-30
1-564-831-11 o CONTACT, CONNECTOR

CN1 1-506-469-21 o CONNECTOR, 4P, MALE
CN2 1-506-702-11 o CONNECTOR POST HEADER, ILG (3P)
1-561-515-00 o PLUG HOUSING, 3P
1-560-372-00 o PLUG CONTACT
CN3 1-506-702-11 o CONNECTOR POST HEADER, ILG (3P)
1-561-515-00 o PLUG HOUSING, 3P
1-560-372-00 o PLUG CONTACT
CN4 1-560-356-00 o CONNECTOR POST HEADER, ILG (2P)
1-561-514-00 o PLUG HOUSING, 2P
1-560-372-00 o PLUG CONTACT

Q1 8-729-201-04 s 2SC2878-A

R1 1-249-422-11 s CARBON 2.7K 5% 1/4W

S1 1-571-767-11 s SWITCH, SLIDE
S2 1-570-491-11 s SWITCH, ROTARY

FRAME

CN102 1-508-942-00 s CONNECTOR, 14P
CN103 1-561-781-31 s BNC (RECEPTACLE)
CN104 1-563-096-11 s CONNECTOR (WITH SW) F 3P
CN105 1-564-603-11 s CONNECTOR (WITH DC SW) 4P

R1 1-247-826-00 s CABON 620

SW101 1-552-665-00 s MICRO "BATT IN"

1.5INCH ELECTRONIC VIEWFINDER



SPECIFICATIONS

Picture tube	1.5-inch monochrome
Indicators	REC/TALLY indicator BATT indicator SHUTTER indicator GAIN UP indicator
Resolution	400 lines
Power requirements	12 V DC
Power consumption	2.3 W
Weight	Approx. 500 g (1 lb 2 oz)
Dimensions	Approx. 186 × 63 × 189 mm (w/h/d) (7 ³ / ₈ × 2 ¹ / ₂ × 7 ¹ / ₂ inches)
Supplied accessory	Operating Instructions (1)

Design and specifications are subject to change without notice.

SONY®
SERVICE MANUAL

TABLE OF CONTENTS

A. BLOCK DIAGRAM

Overall A-1

B. SEMICONDUCTOR

Semiconductor B-1

C. SCHEMATIC DIAGRAM AND BOARD ILLUSTRATION

MAIN
SW
LED



..... C-3

D. SPARE PARTS

D-1. Parts Information D-1

D-2. Screws D-2

D-3. Exploded View D-3

D-4. Electrical Parts List D-5

DXF-325 (J, UC)
DXF-325CE (EK)



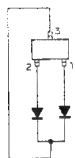
SECTION B

SEMICONDUCTOR PIN ASSIGNMENTS

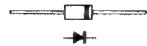
The circuit diagram of IC is obtained from the IC data book published by the manufacturer.

< DIODE >

TOP VIEW (SCALE 4/1)

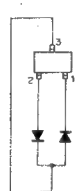


1S2837
DAN202K

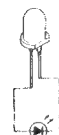


1SS133
1SS136
ERA15-06
ERA22-08

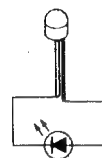
TOP VIEW (SCALE 4/1)



DA204K



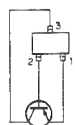
SLH56VT



TL0102A
TLR109A

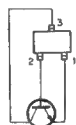
< TRANSISTOR >

TOP VIEW (SCALE 4/1)



2SA812
2SB624

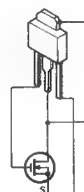
TOP VIEW (SCALE 4/1)



2SC2812
2SC2814
2SC3722K



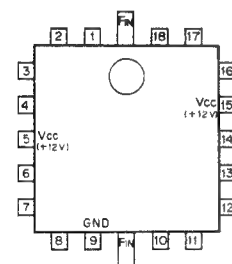
2SD1220



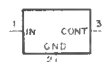
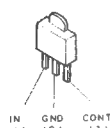
2SK612

< IC >

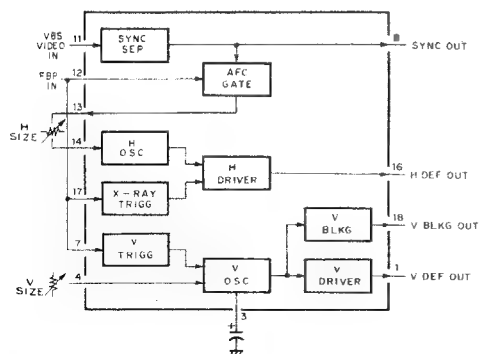
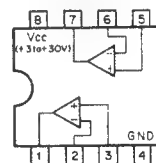
HA11423MP (HITACHI) FLAT PACKAGE
TV H/V SYNC SIGNAL PROCESSOR
- TOP VIEW -



M5236ML (MITSUBISI)
ADJUSTABLE VOLTAGE REGULATOR

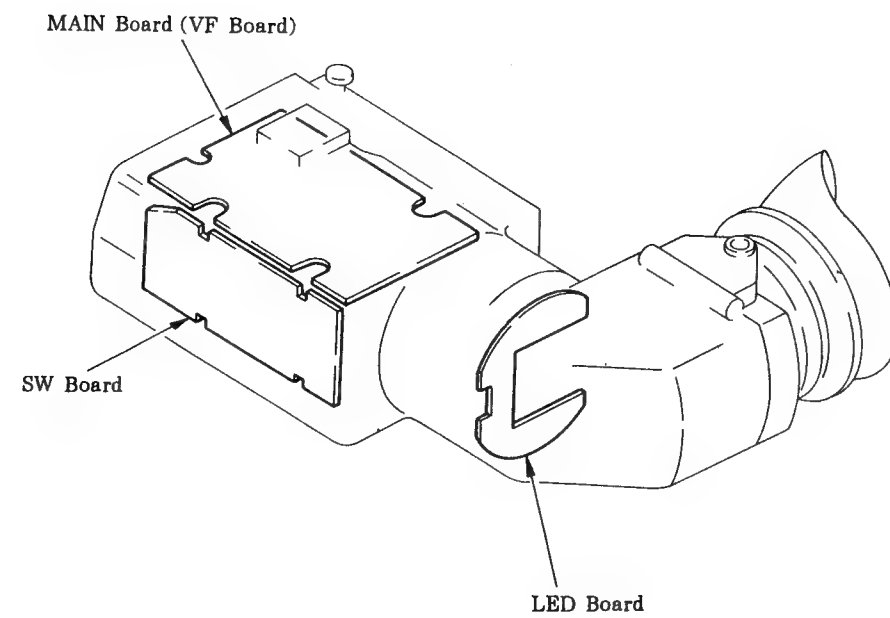


uPC358G2 (NEC) FLAT PACKAGE
DUAL OPERATIONAL AMPLIFIERS
- TOP VIEW -



DXF-325(J, UC)
DXF-325CE(EK)

SECTION C
SCHEMATIC DIAGRAMS AND BOARD ILLUSTRATIONS

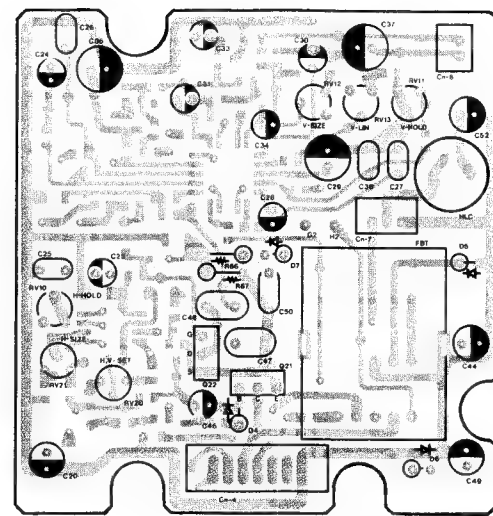


MAIN, SW, LED

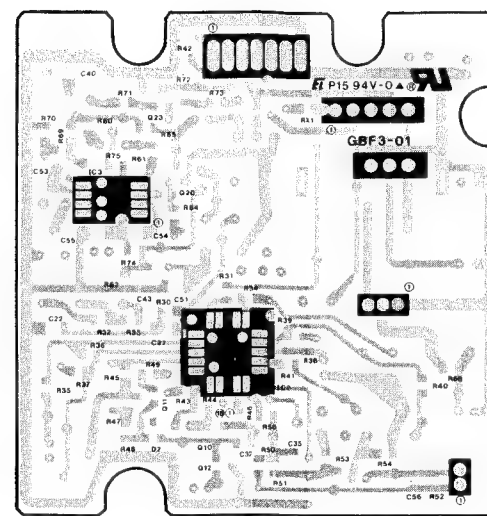
MAIN, SW, LED

MAIN BOARD

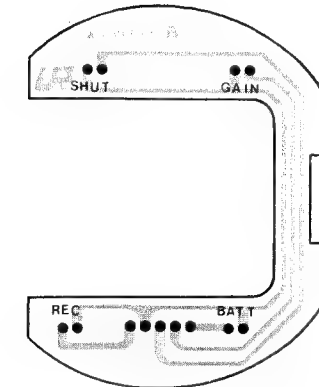
LED BOARD



COMPONENT SIDE

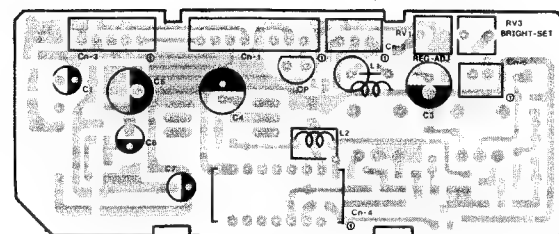


SOLDERING SIDE

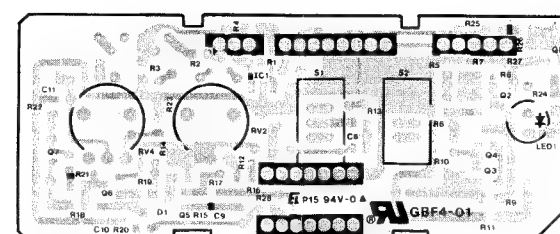


COMPONENT SIDE

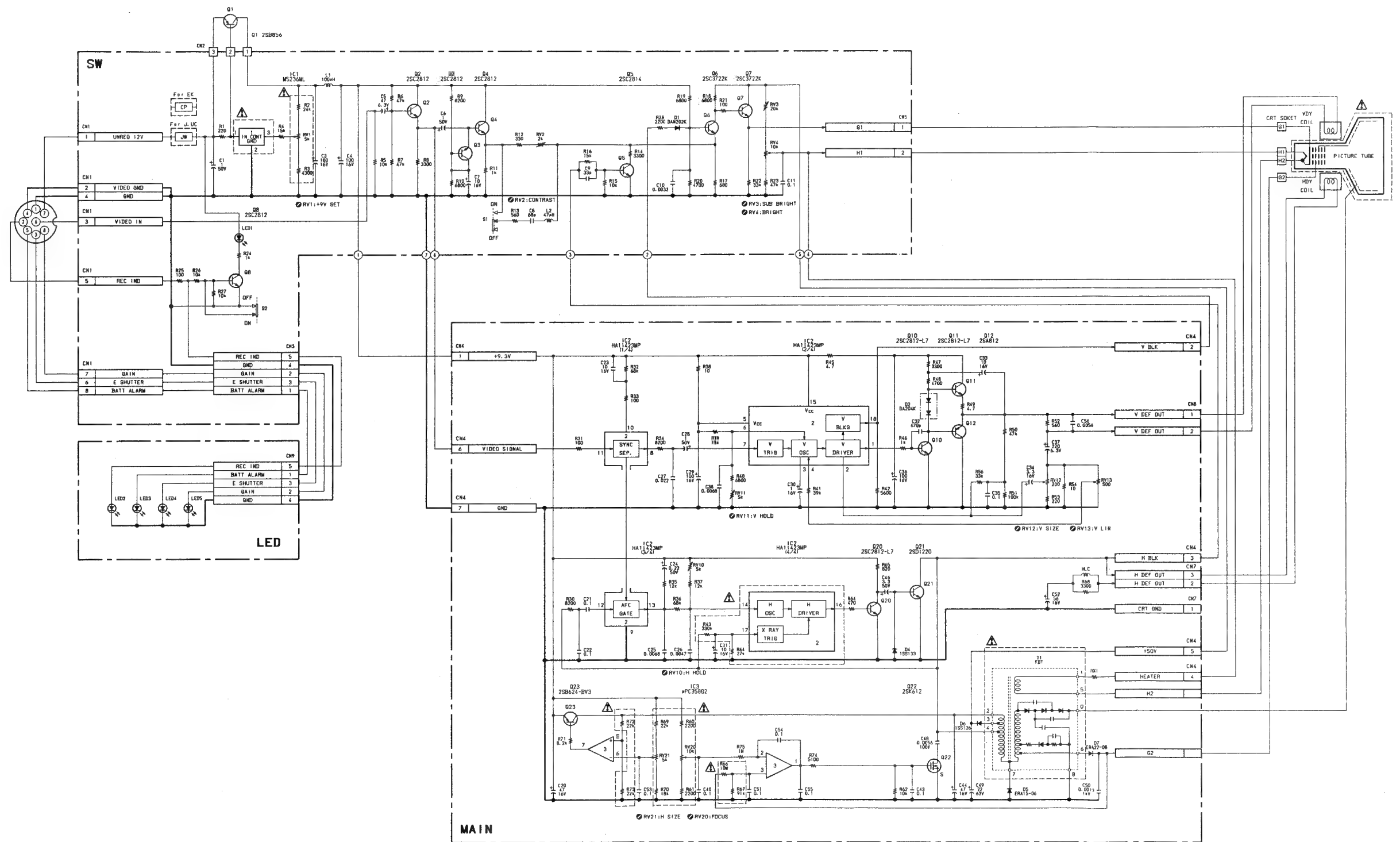
SW BOARD



COMPONENT SIDE



SOLDERING SIDE



SECTION D
SPARE PARTS

D-1. PARTS INFORMATION

1. Safety Related Component Warning

Components identified by shading marked with ! on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.

2. Replacement Parts supplied from Sony Parts Center will sometimes have different shape and outside view from the parts which actually in use. This is due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts." This manual's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present." Regarding engineering parts and diagrams changes in our engineering department, refer SONY service bulletions and service manual supplements.

3. The parts marked with "S" in the SP column of the exploded views and electical spare parts list are nomally required for routine service work. Orders for parts marked with "O" will be processed, but allow for additional delivery time.

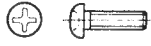
4. Item with no parts number and/or no description are not stocked because they are seldom required for routine service.


5. Abbreviation

REF.No.	DESCRIPTION	REF.No.	DESCRIPTION	REF.No.	DESCRIPTION
C	CAPACITOR	IC	IC	RP	RESISTOR BLOCK
CN	CONNECTOR	J	JACK	RV	VARIABLE RESISTOR
CV	VARIABLE CAPACITOR	L	INDUCTOR	S	SWITCH
D	DIODE	LV	VARIABLE INDUCTOR	T	TRANSFORMER
DL	DELAY LINE	Q	TRANSISTOR	X	OSCILLATOR
FL	FILTER	R	RESISTOR		


All capacitors are in micro farads unless otherwise specified.
All inductors are in micro henries unless otherwise specified.
All resistors are in ohms.


D-2. SCREWS



+B Bzn-N	
	
7-621-□□□-□□	
SIZE	Parts No.
2 x 3	772-00
x 4	772-10
x 5	772-20
x 6	772-30
x 8	772-40
x 10	772-50
x 12	772-60
x 14	772-70
x 16	772-80
x 20	—
2.6 x 3	775-00
x 4	775-10
x 5	775-20
x 6	773-95
x 8	775-40
x 10	775-50
x 12	775-60
x 14	775-70
x 16	775-80
x 20	775-90

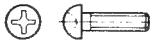
+B Cr-N	
	
7-621-□□□-□□	
SIZE	Parts No.
2 x 3	772-08
x 4	772-18
x 5	771-06
x 6	772-38
x 8	772-48
x 10	772-58
x 12	772-68
x 14	772-78
x 16	772-88
x 20	—
2.6 x 3	775-08
x 4	773-86
x 5	770-87
x 6	770-67
x 8	770-99
x 10	773-87
x 12	775-68
x 14	775-78
x 16	775-88
x 20	773-91

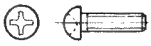
+B Cr-N	
	
7-682-□□□-□□	
SIZE	Parts No.
3 x 3	544-04
x 4	545-04
x 5	546-04
x 6	547-04
x 8	548-04
x 10	549-04
x 12	550-04
x 14	551-04
x 16	552-04
x 20	553-04
4 x 4	558-04
x 5	559-04
x 6	560-04
x 8	561-04
x 10	562-04
x 12	563-04
x 14	564-04
x 16	565-04
x 20	566-04
5 x 8	574-04
x 10	575-04
x 12	576-04
x 14	577-04
x 16	578-04
x 20	579-04


+B Bzn-N	
	
7-682-□□□-□□	
SIZE	Parts No.
3 x 3	544-09
x 4	545-09
x 5	546-09
x 6	547-09
x 8	548-09
x 10	549-09
x 12	550-09
x 14	551-09
x 16	552-09
x 20	553-09
x 30	555-09
4 x 4	558-09
x 5	559-09
x 6	560-09
x 8	561-09
x 10	562-09
x 12	563-09
x 14	564-09
x 16	565-09
x 20	566-09
5 x 8	574-09
x 10	575-09
x 12	576-09
x 14	577-09
x 16	578-09
x 20	579-09

+B Cr-N	
	
7-682-□□□-□□	
SIZE	Parts No.
3 x 3	544-04
x 4	545-04
x 5	546-04
x 6	547-04
x 8	548-04
x 10	549-04
x 12	550-04
x 14	551-04
x 16	552-04
x 20	553-04
4 x 4	558-04
x 5	559-04
x 6	560-04
x 8	561-04
x 10	562-04
x 12	563-04
x 14	564-04
x 16	565-04
x 20	566-04
5 x 8	574-04
x 10	575-04
x 12	576-04
x 14	577-04
x 16	578-04
x 20	579-04

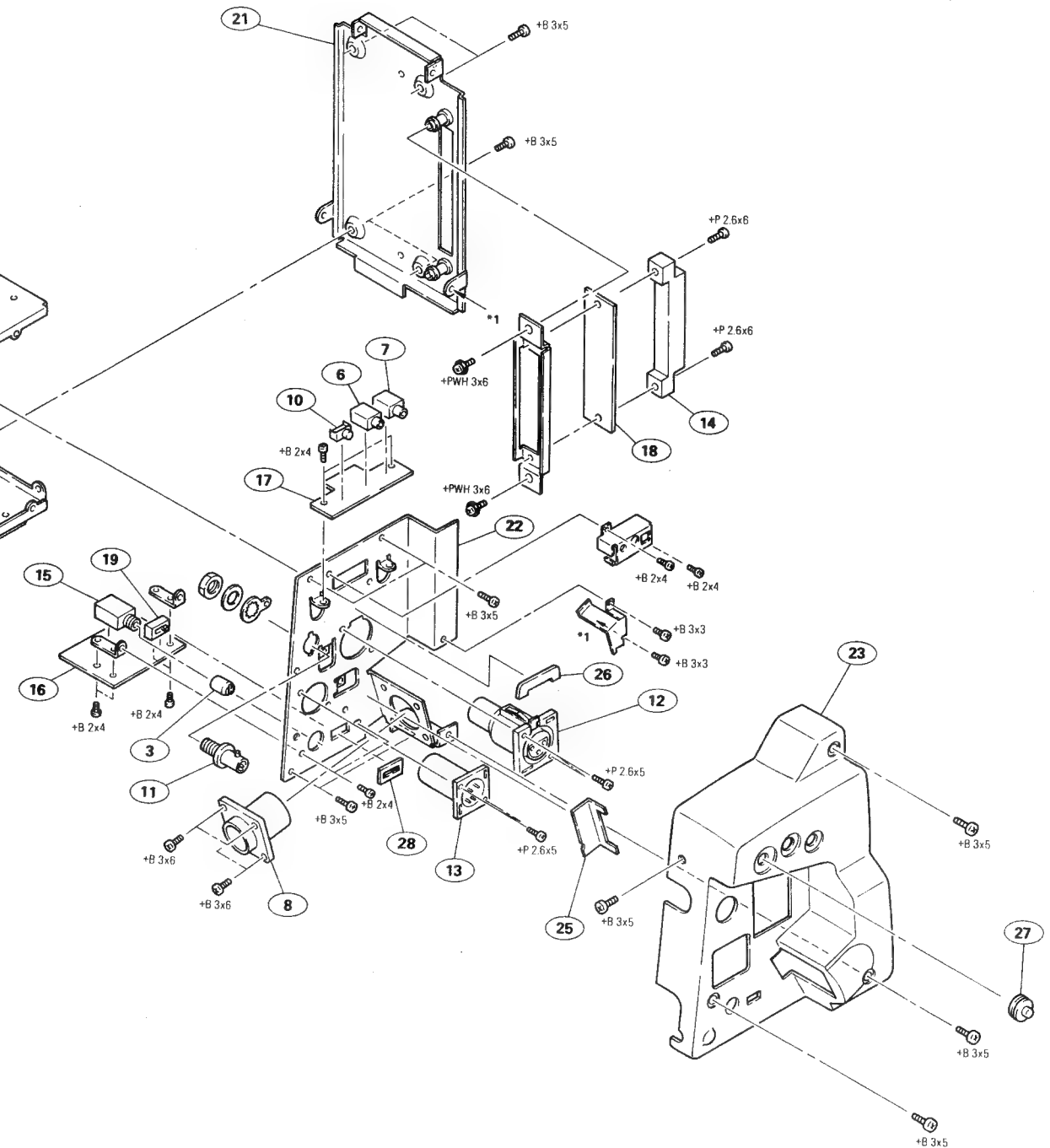
+PSW Czn-N	
	
7-621-□□□-□□	
SIZE	Parts No.
2.6 x 5	759-35
x 6	759-45
x 8	759-65
x 10	759-75
x 12	759-85
x 14	759-95
x 16	760-05
x 20	760-15
x 25	760-65
+PSW Czn-N	
	
7-682-□□□-□□	
SIZE	Parts No.
3 x 6	947-01
x 8	948-01
x 10	949-01
x 12	950-01
x 14	951-01
x 16	952-01
x 20	953-01
x 25	954-01
x 30	955-01
x 35	956-01
x 40	957-01
4 x 8	961-01
x 10	962-01
x 12	963-01
x 14	964-01
x 16	965-01
x 20	966-01
x 25	967-01
x 30	968-01
x 35	969-01
x 40	970-01

PRECISION +P Cr-N	
	
7-627-□□□-□□	
SIZE	Parts No.
1.7 x 1.6	—
x 1.8	—
x 2	552-27
x 2.2	552-87
x 2.5	552-07
x 2.8	—
x 3	552-37
x 3.5	—
x 4	552-47
x 4.5	552-67
x 5	552-57
x 5.5	557-07
x 6	552-77
2 x 1.8	554-37
x 2	553-17
x 2.2	554-07
x 2.5	553-27
x 2.8	—
x 3	553-37
x 3.5	554-17
x 4	553-47
x 4.5	553-57
x 5	553-67
x 5.5	—
x 6	554-27
x 7	553-87
x 8	553-97
x 10	553-77
2.6 x 2.8	556-07
x 3	—
x 3.5	—
x 4	556-37
x 4.5	—
x 5	556-57
x 5.5	—
x 6	556-77
x 7	—
x 8	556-97
x 9	—
x 10	557-47

+P Czn-N	
	
7-621-□□□-□□	
SIZE	Parts No.
2 x 3	255-15
x 4	255-25
x 5	255-35
x 6	255-45
x 8	255-55
x 10	255-65
x 12	255-75
x 14	255-85
x 16	256-05
x 20	256-25
2.3 x 5	257-35
x 6	257-45
x 8	257-55
x 10	257-65
x 12	257-75
x 14	257-85
x 16	258-05
x 20	258-25
2.6 x 3	259-15
x 4	259-25
x 5	259-35
x 6	259-45
x 8	259-55
x 10	259-65
x 12	259-75
x 14	259-85
x 16	260-05
x 20	260-25

+PWH	
	
7-682-□□□-□□	
SIZE	Parts No.
2.6 x 4	—
x 5	902-11
x 6	902-21
x 8	902-31
x 10	—
x 12	902-51
x 14	—
3 x 5	903-01
x 6	903-11
x 8	903-21
x 10	903-31
x 12	903-41
x 14	—
4 x 6	904-01
x 8	904-11
x 10	904-21
x 12	904-31
x 14	904-41
x 16	—
x 20	—

EXPLODED VIEW EXPLODED VIEW



SECTION D

SPARE PARTS

D-1. PARTS INFORMATION

1. Safety Related Component Warning

Components identified by shading marked with ! on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.

2. Replacement Parts supplied from Sony Parts Center will sometimes have different shape and outside view from the parts which actually in use. This is due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts." This manual's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present." Regarding engineering parts and diagrams changes in our engineering department, refer SONY service bulletions and service manual supplements.

3. The parts marked with "S" in the SP column of the exploded views and electrical spare parts list are normally required for routine service work. Orders for parts marked with "O" will be processed, but allow for additional delivery time.


4. Item with no parts number and/or no description are not stocked because they are seldom required for routine service.


5. Abbreviation


REF.No.	DESCRIPTION	REF.No.	DESCRIPTION	REF.No.	DESCRIPTION
C	CAPACITOR	IC	IC	RP	RESISTOR BLOCK
CN	CONNECTOR	J	JACK	RV	VARIABLE RESISTOR
CV	VARIABLE CAPACITOR	L	INDUCTOR	S	SWITCH
D	DIODE	LV	VARIABLE INDUCTOR	T	TRANSFORMER
DL	DELAY LINE	Q	TRANSISTOR	X	OSCILLATOR
FI	FILTER	R	RESISTOR		


All capacitors are in micro farads unless otherwise specified.
All inductors are in micro henries unless otherwise specified.
All resistors are in ohms.


D-2. SCREWS

+K Bzn-N	
	
7-682-□□□-□□	
SIZE	Parts No.
3 x 4	245-09
x 5	246-09
x 6	247-09
x 8	248-09
x 10	249-09
x 12	250-09
x 14	251-09
x 16	252-09
x 20	253-09
4 x 6	260-09
x 8	261-09
x 10	262-09
x 12	263-09
x 14	264-09
x 16	265-09
x 20	266-09
5 x 8	274-09
x 10	275-09
x 12	276-09
x 14	277-09
x 16	278-09
x 20	279-09
x 25	280-09
x 30	281-09
x 35	282-09
x 40	283-09
x 45	284-09
x 50	285-09

PRECISION +P Bzn-N	
	
7-627-□□□-□□	
SIZE	Parts No.
1.7 x 1.6	552-18
x 1.8	—
x 2	552-28
x 2.2	—
x 2.5	552-08
x 2.8	—
x 3	552-38
x 3.5	552-78
x 4	552-48
x 4.5	—
x 5	552-58
x 5.5	—
x 6	—
2 x 1.8	554-38
x 2	553-18
x 2.2	—
x 2.5	553-28
x 2.8	554-58
x 3	553-38
x 3.5	554-18
x 4	553-48
x 4.5	553-58
x 5	554-28
x 5.5	—
x 6	553-68
x 7	553-88
x 8	553-98
x 10	553-78
2.6 x 2.8	556-08
x 3	—
x 3.5	556-28
x 4	556-38
x 4.5	556-48
x 5	556-58
x 5.5	—
x 6	556-78
x 7	—
x 8	—
x 9	—
x 10	—

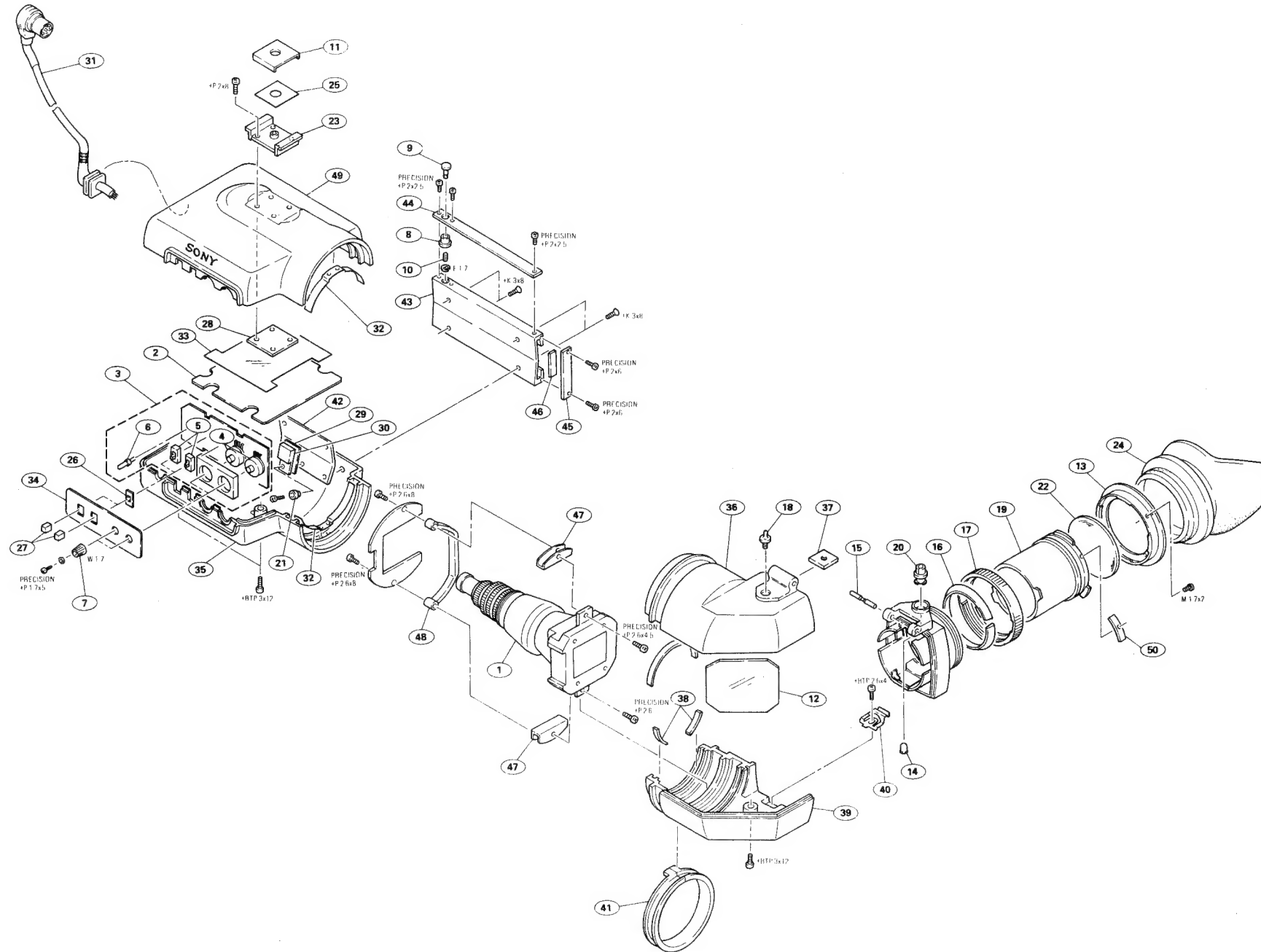
+P Ni-N	
	
7-621-□□□-□□	
SIZE	Parts No.
2 x 3	255-12
x 4	255-22
x 5	255-32
x 6	255-42
x 8	255-52
x 10	255-62
x 12	255-72
x 14	—
x 16	—
x 20	—
2.3 x 5	—
x 6	—
x 8	—
x 10	—
x 12	—
x 14	—
x 16	—
x 20	—
2.6 x 3	259-12
x 4	259-22
x 5	259-32
x 6	259-42
x 8	259-52
x 10	259-62
x 12	259-72
x 14	259-82
x 16	260-02
x 20	260-22

+BTP Bzn-N NON-SLIT	
	
7-685-□□□-□□	
SIZE	Parts No.
2.6 x 4	531-19
2.6 x 5	532-19
2.6 x 6	533-19
2.6 x 8	534-19
2.6 x 10	535-19
2.6 x 12	536-19
2.6 x 14	537-19
2.6 x 16	538-19
3 x 5	544-19
3 x 6	545-19
3 x 8	546-19
3 x 10	547-19
3 x 12	548-19
3 x 14	549-19
3 x 16	550-19
3 x 20	551-19
3 x 25	552-19
3 x 30	553-19
3 x 35	554-19
3 x 40	555-19
3 x 45	—
3 x 50	596-19
3 x 60	—

+P Bzn-N	
	
7-621-□□□-□□	
SIZE	Parts No.
2 x 3	255-10
x 4	255-20
x 5	283-00
x 6	255-40
x 8	255-50
x 10	283-10
x 12	283-70
x 14	—
x 16	—
x 20	256-20
2.3 x 5	—
x 6	—
x 8	—
x 10	—
x 12	—
x 14	—
x 16	—
x 20	—
2.6 x 3	259-10
x 4	284-00
x 5	284-10
x 6	284-20
x 8	284-30
x 10	284-40
x 12	259-70
x 14	259-80
x 16	260-00
x 20	260-20

EXPLODED VIEW

D-3. EXPLODED VIEW



No.	Parts No.	SP Description
A1	1-546-078-11	s CRT/DY ASSY
2	1-589-128-11	o MAIN BOARD
3	1-589-129-11	o SW BOARD (FOR UC)
	1-589-129-21	o SW BOARD (FOR EK)
4	1-230-075-11	s CARBON 2K "CONTR" "BRIGHT"
5	1-570-845-11	s SWITCH, SLIDE "PEAKING ON/OFF" "TALLY ON/OFF"
6	1-994-802-01	s LED, SLH-56VT
7	2-277-453-00	o KNOB, CONTROL
8	2-277-456-00	o COLLER, STOPPER
9	2-277-457-00	s KNOB, STOPPER
10	2-277-466-01	o SPRING, COMPRESSION
11	2-277-468-00	o PLATE, ORNAMENTAL, CAMERA SHOE
12	2-381-411-00	o MIRROR
13	2-381-426-02	o RING, LENS
14	2-381-461-02	s PIN, BLIND
15	2-381-462-01	o PIN
16	2-381-466-01	o RING, RETAINER
17	2-381-467-01	o RING (2), LENS
18	2-381-468-01	s PIN, STOPPER
19	2-381-470-02	o HOLDER, LENS
20	2-381-472-02	o STOPPER
21	2-832-007-00	s BUSHING (K), INSULATING
22	3-657-626-00	o LUPE, VF
23	3-657-700-00	s BRACKET, ACCESSORY
24	3-657-771-02	s EYECUP (2)
25	3-672-213-00	o SHEET, ADHESIVE
26	3-680-604-01	o PLATE, BLIND
27	3-680-605-00	o CAP, SLIDE
28	3-688-709-01	o NUT, PLATE, SHOE
29	3-703-037-00	s INSULATOR, TO-220
30	8-829-315-63	s TRANSISTOR, 2SB856
31	9-994-797-01	s CABLE, VF
32	9-994-811-01	o SPRING, PLATE
33	9-994-812-01	o INSULATOR
34	9-994-813-01	o LABEL, SW
35	9-994-814-01	o CASE, BOTTOM
36	9-994-815-01	o HOLDER T, OUTSIDE
37	9-994-816-01	o PLATE, NUT
38	9-994-817-01	o MOLT
39	9-994-818-01	o HOLDER B, OUTSIDE
40	9-994-819-01	o PIN, LOCK
41	9-994-820-01	o LING, SLIDE
42	9-994-821-01	o NUT, PLATE, CASE
43	9-994-822-01	o GUIDE, VF SLIDE
44	9-994-823-01	o LABEL, SLIDE
45	9-994-824-01	o STOPPER
46	9-994-825-01	o RUBBER, STOPPER
47	9-994-826-01	o STOPPER, PWB
48	9-994-827-01	o COLLER
49	9-998-810-00	o CASE, TOP
50	2-381-493-01	o PLATE, STOPPER
	Ser No. 30981	and higher (J)
	12091	and higher (UC)
	42851	and higher (EK)

D-4. ELECTRICAL PARTS

Ref. No. Part No. SP Description

RESISTOR, CHIP

1/10W

0 - 3.3M (E12) +-5% 1/10W

1-216-295-00	s	RES, CHIP	0	5%	1/10W
1-216-298-00	s	RES, CHIP	2.2	5%	1/10W
1-216-302-00	s	RES, CHIP	2.7	5%	1/10W
1-216-304-00	s	RES, CHIP	3.3	5%	1/10W
1-216-306-00	s	RES, CHIP	3.9	5%	1/10W
1-216-308-00	s	RES, CHIP	4.7	5%	1/10W
1-216-309-00	s	RES, CHIP	5.6	5%	1/10W
1-216-311-00	s	RES, CHIP	6.8	5%	1/10W
1-216-313-00	s	RES, CHIP	8.2	5%	1/10W
1-216-001-00	s	RES, CHIP	10	5%	1/10W
1-216-003-00	s	RES, CHIP	12	5%	1/10W
1-216-005-00	s	RES, CHIP	15	5%	1/10W
1-216-007-00	s	RES, CHIP	18	5%	1/10W
1-216-009-00	s	RES, CHIP	22	5%	1/10W
1-216-011-00	s	RES, CHIP	27	5%	1/10W
1-216-013-00	s	RES, CHIP	33	5%	1/10W
1-216-015-00	s	RES, CHIP	39	5%	1/10W
1-216-017-00	s	RES, CHIP	47	5%	1/10W
1-216-019-00	s	RES, CHIP	56	5%	1/10W
1-216-021-00	s	RES, CHIP	68	5%	1/10W
1-216-023-00	s	RES, CHIP	82	5%	1/10W
1-216-025-00	s	RES, CHIP	100	5%	1/10W
1-216-027-00	s	RES, CHIP	120	5%	1/10W
1-216-029-00	s	RES, CHIP	150	5%	1/10W
1-216-031-00	s	RES, CHIP	180	5%	1/10W
1-216-033-00	s	RES, CHIP	220	5%	1/10W
1-216-035-00	s	RES, CHIP	270	5%	1/10W
1-216-037-00	s	RES, CHIP	330	5%	1/10W
1-216-039-00	s	RES, CHIP	390	5%	1/10W
1-216-041-00	s	RES, CHIP	470	5%	1/10W
1-216-043-00	s	RES, CHIP	560	5%	1/10W
1-216-045-00	s	RES, CHIP	680	5%	1/10W
1-216-047-00	s	RES, CHIP	820	5%	1/10W
1-216-049-00	s	RES, CHIP	1k	5%	1/10W
1-216-051-00	s	RES, CHIP	1.2k	5%	1/10W
1-216-053-00	s	RES, CHIP	1.5k	5%	1/10W
1-216-055-00	s	RES, CHIP	1.8k	5%	1/10W
1-216-057-00	s	RES, CHIP	2.2k	5%	1/10W
1-216-059-00	s	RES, CHIP	2.7k	5%	1/10W
1-216-061-00	s	RES, CHIP	3.3k	5%	1/10W
1-216-063-00	s	RES, CHIP	3.9k	5%	1/10W
1-216-065-00	s	RES, CHIP	4.7k	5%	1/10W
1-216-067-00	s	RES, CHIP	5.6k	5%	1/10W
1-216-069-00	s	RES, CHIP	6.8k	5%	1/10W
1-216-071-00	s	RES, CHIP	8.2k	5%	1/10W
1-216-073-00	s	RES, CHIP	10k	5%	1/10W
1-216-075-00	s	RES, CHIP	12k	5%	1/10W
1-216-077-00	s	RES, CHIP	15k	5%	1/10W
1-216-079-00	s	RES, CHIP	18k	5%	1/10W
1-216-081-00	s	RES, CHIP	22k	5%	1/10W

Ref. No. Part No. SP Description

1-216-083-00	s	RES, CHIP	27k	5%	1/10W
1-216-085-00	s	RES, CHIP	33k	5%	1/10W
1-216-087-00	s	RES, CHIP	39k	5%	1/10W
1-216-089-00	s	RES, CHIP	47k	5%	1/10W
1-216-091-00	s	RES, CHIP	56k	5%	1/10W
1-216-093-00	s	RES, CHIP	68k	5%	1/10W
1-216-095-00	s	RES, CHIP	82k	5%	1/10W
1-216-097-00	s	RES, CHIP	100k	5%	1/10W
1-216-099-00	s	RES, CHIP	120k	5%	1/10W
1-216-101-00	s	RES, CHIP	150k	5%	1/10W
1-216-103-00	s	RES, CHIP	180k	5%	1/10W
1-216-105-00	s	RES, CHIP	220k	5%	1/10W
1-216-107-00	s	RES, CHIP	270k	5%	1/10W
1-216-109-00	s	RES, CHIP	330k	5%	1/10W
1-216-111-00	s	RES, CHIP	390k	5%	1/10W
1-216-113-00	s	RES, CHIP	470k	5%	1/10W
1-216-115-00	s	RES, CHIP	560k	5%	1/10W
1-216-117-00	s	RES, CHIP	680k	5%	1/10W
1-216-119-00	s	RES, CHIP	820k	5%	1/10W
1-216-121-00	s	RES, CHIP	1.0M	5%	1/10W
1-216-123-00	s	RES, CHIP	1.2M	5%	1/10W
1-216-125-00	s	RES, CHIP	1.5M	5%	1/10W
1-216-127-00	s	RES, CHIP	1.8M	5%	1/10W
1-216-129-00	s	RES, CHIP	2.2M	5%	1/10W
1-216-131-00	s	RES, CHIP	2.7M	5%	1/10W
1-216-133-00	s	RES, CHIP	3.3M	5%	1/10W

Ref. No. Part No. SP Description

MAIN BOARD

1-589-128-11 o MOUNTED CIRCUIT BOARD
"MAIN"

9-994-794-01 s CRT

C20 9-994-781-01 s TANTALUM 47 16V
C21 1-163-038-11 s CHIP CERAMIC 0.1 25V
C22 1-163-038-11 s CHIP CERAMIC 0.1 25V
C23 1-126-157-11 s ELECT 10 20% 16V
C24 1-124-464-11 s ELECT 0.22 20% 50V

C26 9-994-780-01 s P-P CONDENCER 0.0047
C28 1-124-438-11 s ELECT 1 20% 50V
C29 1-124-584-11 s ELECT 100 20% 10V
C30 1-131-347-00 s TANTALUM 1 10% 35V
C31 1-126-157-11 s ELECT 10 20% 16V

C32 1-163-133-11 s CHIP CERAMIC 470PF 5% 50V
C33 1-126-157-11 s ELECT 10 20% 16V
C34 1-126-162-11 s ELECT 3.3 20% 50V
C35 1-163-088-11 s CHIP CERAMIC 0.1 25V
C36 1-124-455-00 s ELECT 100 20% 16V

C37 9-994-777-01 s ELECT 220 6.3V
C38 1-130-481-11 s CAP,PE TEREPHTHALATE
0.0068 5% 50V
C40 1-163-088-11 s CHIP CERAMIC 0.1 25V
C43 1-163-088-11 s CHIP CERAMIC 0.1 25V
C44 9-994-782-01 s TANTALUM 47 16V

C46 1-126-162-11 s ELECT 3.3 20% 50V
C48 9-994-783-01 s 0.0056 100V
C49 9-994-778-01 s ELECT 22 63V
C50 9-994-784-01 s 0.0015 1K
C51 1-163-088-11 s CHIP CERAMIC 0.1 25V

C52 9-994-779-01 s ELECT 56 16V
C53 1-163-088-11 s CHIP CERAMIC 0.1 25V
C54 1-163-088-11 s CHIP CERAMIC 0.1 25V
C55 1-163-088-11 s CHIP CERAMIC 0.1 25V

CN4 9-994-791-01 o RECEPTACLE, 7P
CN7 9-994-792-01 o RECEPTACLE, 3P
CN8 9-994-793-01 o RECEPTACLE, 2P

D2 8-719-914-42 s DA204K
D4 8-719-911-19 s 1SS119
D5 9-994-773-01 s ERA15-06
D6 9-994-774-01 s 1SS136
D7 8-719-948-45 s ERA22-08

Ref. No. Part No. SP Description

HLC 1-459-823-11 s COIL,HORIZONTAL LINEARITY

IC2 8-759-300-28 s HA11423MP: HITACHI

IC3 8-759-100-94 s μ PC358G2:

Q10 8-729-881-23 s 2SC2812-L7
Q11 8-729-881-23 s 2SC2812-L7
Q12 8-729-100-76 s 2SA812
Q20 8-729-881-23 s 2SC2812-L7
Q21 9-994-771-01 s 2SD1220

Q22 8-729-119-00 s 2SK612
Q23 8-729-162-43 s 2SB624-BV3

R43 1-216-109-11 s CHIP 330K 5% 1/10W
R44 1-216-083-11 s CHIP 27K 5% 1/10W
R60 1-216-057-11 s CHIP 2.2K 5% 1/10W
R61 1-216-057-11 s CHIP 2.2K 5% 1/10W
R66 9-994-785-01 s 10M
R67 9-994-786-01 s 91K

R69 1-216-081-11 s CHIP 22K 5% 1/10W
R70 1-216-079-11 s CHIP 18K 5% 1/10W
R72 1-216-081-11 s CHIP 22K 5% 1/10W
R73 1-216-081-11 s CHIP 22K 5% 1/10W

RV10 9-994-787-01 s 5K
RV11 9-994-788-01 s 5K
RV12 9-994-789-01 s 200
RV13 9-994-790-01 s 500

RV20 1-228-459-11 s METAL 10K
RV21 1-228-458-11 s METAL 5K

T1 1-439-419-11 s FBT

Ref. No. Part No. SP Description

Ref. No. Part No. SP Description

SW BOARD

1-589-129-11 o MOUNTED CIRCUIT BOARD "SW"
(J,UC)
1-589-129-21 o MOUNTED CIRCUIT BOARD "SW"
(EK)

△ R2 9-994-799-01 s CHIP 24K 5% 1/10W
R3 1-216-064-11 s CHIP 4.3K 5% 1/10W

C1 1-124-438-11 s ELECT 1 20% 50V
C3 1-124-584-11 s ELECT 100 20% 10V
C4 1-124-584-11 s ELECT 100 20% 10V
C5 1-126-154-11 s ELECT 47 20% 6.3V
C6 1-124-438-11 s ELECT 1 20% 50V

C7 1-124-462-11 s ELECT 10 20% 16V
C8 1-163-113-11 s CHIP CERAMIC 68PF 5% 50V
C9 1-163-105-11 s CHIP CERAMIC 33PF 5% 50V
C10 1-163-015-11 s CHIP CERAMIC 0.0033 10%
50V
C11 1-163-038-11 s CHIP CERAMIC 0.1 25V

△ RV1 1-228-473-11 s METAL 5K
RV2 1-230-075-11 s CARBON 2K "CONTR"
RV3 1-228-475-11 s METAL 20K
RV4 1-226-368-11 s CARBON 10K "BRIGHT"

S1 1-570-845-11 s SLIDE "PEAKING ON/OFF"
S2 1-570-845-11 s SLIDE "TALLY ON/OFF"

CN1 9-994-803-01 o 8P
CN2 9-994-804-01 o 3P
CN3 9-994-805-01 o 5P
CN4 9-994-806-01 o 7S
CN5 9-994-807-01 o 2P

LED BOARD

1-589-127-11 o MAUNTED CIRCUIT BOARD
"LED"

CP 9-994-808-01 s PROTECTORS ICP-N10(EK)

9-994-810-01 o LED PWB

D1 8-719-914-43 s DAN202K

CN9 9-994-809-01 o RECEPTACLE, 5P

△ IC1 8-759-630-27 s M5236ML: MITSUBISHI

LED2 8-719-800-25 s TLR109A
LED3 8-719-800-25 s TLR109A
LED4 8-719-800-25 s TLR109A
LED5 8-719-800-19 s TLO102A

L1 9-994-800-01 s 100μH
L2 9-994-801-01 s 47μH

FRAME

LED1 9-994-802-01 s SLH-56VT

Q1 8-729-315-63 s 2S8856

Q2 8-729-881-23 s 2SC2812-L7
Q3 8-729-881-23 s 2SC2812-L7
Q4 8-729-881-23 s 2SC2812-L7
Q5 1-806-828-11 s 2SC2814
Q6 9-994-796-01 s 2SC3722K
Q7 9-994-796-01 s 2SC3722K
Q8 8-729-881-23 s 2SC2812-L7

D-5. PACKING MATERIAL AND ACCESSORIES

3-699-152-01 o CUSHION, UPPER
3-699-153-01 o CUSHION, LOWER
3-699-163-01 o CARTON. INDIVIDUAL(UC)
3-699-165-01 o CARTON. INDIVIDUAL(EK)